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Supply Chains and Porous Boundaries: The Disaggregation of Legal Services

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THE DISAGGREGATION OF LEGAL SERVICES

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INTRODUCTION

An announcement on June 18, 2009, by global mining company Rio Tinto sent a powerful message to law firms that the world is changing. The company declared that it had entered into an agreement with legal process outsourcing (LPO) company CPA Global to perform legal work on a scale that would reduce Rio Tinto’s annual legal expenses by an estimated twenty percent, or tens of millions of dollars.1 This work currently was being done by lawyers in the company’s legal department. Traditionally, if a company’s inside lawyers did not handle legal work, the company engaged an outside law firm to do much of it. Rio Tinto’s managing attorney, Leah Cooper, however, explained that the company no longer wanted to pursue that option: “For a long time,” she said, “we’ve been asking law firms to provide us with ways to better control and predict our costs, but at best they offered a discount or a cap in fees . . . . In the end, we decided to take the initiative ourselves.”2

A team of CPA lawyers in India will be dedicated to working for Rio Tinto, and Cooper has said that she wants them to function as does any other Rio Tinto office.3 At the time of the announcement, CPA had already completed forty projects for the company, including contract review, legal research and analysis, merger and acquisition due diligence work, and draft joint venture agreements, as well as gathering fifty lawyers within forty-eight hours in Washington D.C. to handle an electronic discovery request from the Federal Trade Commission.4 The majority of the work that the LPO will be performing is relatively routine, but Rio Tinto stresses that most of it “is not volume-based; it’s day-to-day work that requires constant communication.”5 Furthermore, the mining company wants CPA lawyers to take on more sophisticated and strategic work.6

Rio Tinto’s announcement occurred in the midst of an economic recession, but the forces that led to it were in place well before the downturn. Corporate clients in recent years increasingly have insisted that law firms provide legal services more efficiently. Inside counsel have the responsibility to meet a budget just like any other corporate department. They are asked to be increasingly productive—often to do more on a smaller budget. This requires that they minimize their companies’ spending on legal services and be able to predict for corporate managers what those expenses will be. Since spending on outside law firms is the lion’s share of most corporate legal department budgets, counsel are putting pressure on

1. Breaking New Ground, LEGAL STRATEGY REV., Summer 2009, at 13, 15. The company estimates that using CPA Global will result in cost savings of 3:1 for work that would have been done in house and 7:1 for work that would have been sent to outside law firms. Id. at 14.
2. Id. at 13.
3. Id. at 14.
4. Id.
5. Id. at 15.
6. Id.
firms to deliver better services at lower cost. Some are entering into variations of fixed fee arrangements, under which a firm will agree to handle a particular matter within a certain budget, with the possibility of adjustments depending on the outcome. In this and other ways, corporate clients are asking firms to share more of the legal risk, and to consider how they can be more innovative and cost effective in providing representation.

Rio Tinto’s contract with CPA Global represents an initiative in which inside counsel is attempting to manage legal costs by expanding competition for corporate legal work beyond law firms. CPA Global will be doing millions of dollars worth of work that law firm associates otherwise would be doing. Rio Tinto’s standard for using CPA lawyers poses a direct threat to firms: “If you had a junior associate sitting next to you, would you hand the assignment to that junior associate? If the answer is ‘yes,’ it can probably go to India.” At present, this work is mainly routine, but law firms can make considerable profits by having associates perform it. In addition, much of it traditionally has provided opportunities for young law firm lawyers to gain experience and training. The competitive threat to law firms does not end there, however. Rio Tinto is not satisfied with limiting CPA Global to routine work; it wants the LPO increasingly to assume responsibility for more complex matters. As CPA does so, this will mean even less business for outside law firms. Rio Tinto stresses that it will still hire law firms for their “strategic expertise.” As time goes on, and LPOs gain more sophisticated expertise, however, that may begin to encompass a smaller and smaller portion of work, which could spell trouble for many of today’s large law firms.

To compete in this world, law firms will have to begin considering how they might engage in the same disaggregation process as their clients. That is, they will need to break work down into discrete units and determine who is the most cost-efficient provider of each component. In some cases, that provider may be outside the firm, and the firm will need to engage in outsourcing. Law firms thus might increasingly face the same decision that their corporate clients regularly confront: whether to produce all the goods or services they need inside the firm or contract to obtain them from third parties in the market.

If the legal services market so develops, that sector of the economy would come to mimic the way that production is organized in many other industries. Corporate outsourcing of legal work is an example of what many organizations—including law firms—have been doing for many years: outsourcing administrative and support services. Outside vendors now assume responsibility for human resources, accounting, and information technology functions for many economic enterprises. These are all activities that assist an organization in conducting its basic line of

business, whether manufacturing automobiles or providing telecommunications service. For corporations, legal services also constitute a support function that helps a company pursue its mission. For Rio Tinto's business is not providing legal services, but mining, and the law department helps it conduct this business effectively.

For law firms, however, providing legal services is their business. In economic terms, having a portion of that work done by people outside the firm constitutes outsourcing parts of its production operations to third parties. Widespread adoption of this practice by law firms therefore would correspond to corporations' increasing tendency to divide up the process of producing goods and services into discrete components and contracting with suppliers to provide them. As Walter Powell has observed, "the growing reliance of established firms in all industries on outside parties for nearly every stage in the research, design, and production process has become very strong."

Examples from manufacturing and service industries illustrate how far this trend has progressed. In aerospace manufacturing, companies have begun to outsource responsibility not only for producing discrete parts of an aircraft but for more complex and knowledge-intensive activities, such as conceptualization and design. Boeing, for example, outsourced the design of wings for 7E7 aircraft to a Japanese company and production of parts of the fuselage to an Italian company. It gave "total production competence" to those companies; they were responsible for that entire section of the aircraft from conceptualization to production. This design and production task is technologically complex and requires substantial knowledge on the part of the outside companies. Outsourcing such functions, however, has significantly reduced costs in this industry. Companies have enjoyed these savings despite significant costs associated with moving technology and production capacity to a new location. The aerospace industry was long regarded as a highly specialized industry that produced goods that had to be assembled in a specific way in a single location. As more producers realize that they can segment the production process, they have increasingly

12. Id. at 3.
13. Id.
reaped the substantial cost savings that can come from outsourcing production to third parties that make up a company’s supply chain.

Outsourcing also has progressed significantly in healthcare services in recent years—an industry that is similar to legal services in its demand for advanced training and complex judgment, and in the traditional belief that providing service in person is essential. Advances in information and communications technology have spurred this development. Medical services such as interpreting CAT scans and MRIs, writing radiology reports, transcribing medical notes, and remote diagnosis are now common, with much of the work performed overseas. For instance, when medical providers are stretched thin, especially during the nighttime hours in the United States, qualified physicians in India are able to review their diagnoses and provide additional assurance that they are accurate. In areas where medical services cannot be provided on a consistent basis, physicians in other states and countries can step in remotely and provide immediate medical advice. Furthermore, some rural hospitals now rely on remote electronic Intensive Care Unit (ICU) providers, who “simultaneously monitor ICU patients in several hospitals from a central location.” The providers use video surveillance and real-time data feeds to consult with and advise nurses at the bedside.

The American Telemedicine Association (ATA) reports that, while radiology makes the greatest use of remote services, other specialties including dermatology, ophthalmology, mental health, cardiology, and pathology do as well. The ATA estimates that over fifty subspecialties have used telemedicine, which it defines as “the use of medical information exchanged from one site to another via electronic communications.” A hospital or group of physicians thus is increasingly likely to deliver medical services by contracting with a network of specialized providers who may be located anywhere in the world.

As a result, a growing number of companies are producing goods and services by relying on supply chains that extend beyond the formal boundaries of the organization. This article examines the prospect that law firms will move in this direction and the implications for the organization of

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18. Id.


20. Id.
legal services and legal careers if they did. It does so, first, by analyzing scholarship on what has been called the “make or buy” decision, and then by examining research on the various ways that extending production beyond a firm’s boundaries can affect an organization and its employees.

Much of our analysis necessarily will be tentative. There has been no sustained theoretical or empirical work on the disaggregation of law firm services or the use of outsourcing to help provide them. We suggest that scholarship on other business organizations may provide at least a preliminary framework for thinking about these issues, but that framework inevitably will need to be revised to take account of the distinctive features of law firms and legal services. As a result, this article likely will raise at least as many questions as it answers. We hope, however, that they are questions that lead to a deeper understanding of the forces shaping law firm practice at the beginning of the twenty-first century.

I. DISAGGREGATION AND ECONOMIC THEORY

A. The Make or Buy Decision

Ronald Coase was among the first to explore the logic of market organizations. In The Nature of the Firm, Coase asks why the market is organized into large firms rather than as individual entrepreneurs working as independent contractors. The prevailing theory in Coase’s time was that the market is always the most efficient method of production and that outsourcing theoretically will always be the most efficient option. Coase, however, suggested that firms exist because individuals cannot effectively manage production by themselves. He noted that there are substantial costs associated with using the market, which are associated with contracting, controlling risk, and delivering a product. For many of the goods that Coase studied, the cost of labor and delivery connected with the end product was greater than the cost of the capital inputs that went into production. As a result, individual entrepreneurs arranged themselves into larger collectives in order to deal more efficiently with, and spread the costs of, the production process.

This analysis led Coase to establish guidelines for firms in assessing whether to make a product or provide a service within the firm or to obtain it from an outside supplier. These guidelines suggest that a firm will choose to produce more goods internally when the costs of doing so are not outweighed by the potential benefits of sending production outside the firm. In order to calculate the costs and benefits of each alternative, Coase developed three criteria for firms to analyze: the costs of organizing

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22. Id. at 388.
23. See id. at 389.
25. Coase, supra note 21, at 394.
production, the likelihood of mistakes, and the marginal benefit of increasing production. Firms should be structured so as to attain an optimal balance between production inside and outside of the firm. The growth of those that fail to strike this balance will be constrained. Firms thus represent a delicate balance of costs and benefits, which are influenced by the size of the firm and the nature of its production. Coase focuses much of his attention on the process by which a firm can determine the optimal point between internal production and outsourcing of goods and services.

Coase's theories, known collectively as relating to the "make or buy" decision, have become pervasive in modern economic and business analysis. Scholars since Coase have identified various other industries in which the concept of the make or buy decision is applicable and have built upon the framework of the original theory.

In expanding upon and refining Coase's work, Oliver Williamson arrived at the conclusion that nearly all decisions in the firm are, or ought to be, determined by the relative costs of internally producing or transacting for the production of goods. He theorized that this calculation should dictate whether firms integrate their production completely internally—that is, are vertically integrated—or send all or part of their production outside the firm—in other words, are vertically disintegrated. To use Williamson's terms, firms can rely either on hierarchies or markets to organize production.

Key considerations in the make or buy decision include the extent to which a firm can decompose its production process, determine which assets are firm specific, and address risks associated with uncertainty. First, firms must be able to separate their activities into relatively discrete components or stages whose production can be assigned to the most cost-efficient providers. In manufacturing, such decomposition is of course common, since the production process involves the use of distinct items that can be separately created and then assembled in sequences that culminate in a finished product. In some cases, the components are designed so that there is virtually no need for coordination among them. One portion of an

26. Id. at 396–97.
27. See id. at 389.
automobile can be assembled, for instance, and then fitted seamlessly into another portion because the two have been designed to fit together. Even if this process occurs within a single organization, theoretically "[e]ach module, at the extreme, could become the sole business of a specialist firm, which would have complete design authority over the specific module on which it focuses." In other instances, there may be more need for supervision to ensure that the completed product of one phase of production is smoothly handed off in useable form to those responsible for the next phase.

In the service sector, decomposition has relied on analysis of work flow, or the steps involved in providing a service to an end user. These steps are subdivided into constituent sets of tasks and activities, with an estimate of the time and resources required for each. Each step serves as the equivalent of a module that can be performed by one set of actors and handed off to others involved in succeeding steps. Workflow systems may be nested within larger projects to handle portions of work that can be standardized.

A second step in the make or buy decision is to identify which resources are especially valuable to a firm's core activities and crucial to its distinctive expertise. Assets that fall into this category are said to be high in "specificity." Core functions traditionally have been defined as those value-creating activities that are crucial to an organization's competitive advantage. "The nature of the core activity or function differs from one organization to another: for an automobile manufacturing plant, the core activity might be assembling a car; for a school, it is educating students; and for a bank, it might be handling financial transactions." Because of the risks associated with external production, products high in asset specificity generally are produced internally. By contrast, products that are low in asset specificity are more likely to be acquired from parties in the market.

Williamson identifies four types of asset specificity: site specificity, physical asset specificity, dedicated asset specificity, and human asset

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34. See id. at 169.
38. Id.
39. Id.
Most relevant to our discussion are physical asset specificity, dedicated asset specificity, and human asset specificity. Physical asset specificity exists when a party makes an investment in particular infrastructure that would have a lower value in other transactions. Firms that invest in information technology infrastructure, for example, are making investments in physically specific assets. Dedicated assets are investments made in anticipation of a specific contract. Human asset specificity is perhaps the most important for firms in the service industry. Such assets represent investments in a labor pool whose skills are used in the firm’s production process.

Paul Joskow has focused on the influence of asset specificity on the make or buy decision in his empirical work on transaction cost theory. His analysis of investments in infrastructure for the mining, production, and use of coal has led him to conclude that asset specificity is one of the most significant factors in explaining the extent to which firms internalize or externalize production. Specifically, Joskow has found that when an asset is of high value to the firm, the firm is likely to keep production of it inside or engage in long-term contracting to reduce risks associated with acquiring the asset from an outside producer.

Joskow’s findings are drawn from studies of coal power plants, coal miners, and the contractual relationships that shaped the coal industry during the 1980s. His research examined how power plants that burn coal to produce energy can become more efficient by outsourcing coal mining in some situations, using spot contracts for coal in others, and mining the coal themselves in still other instances. Joskow found that within the coal industry, power plants engaged in different forms of contracting and production in order to secure the coal that they needed for their production process. Power plants were likely either to engage in long-term contracting to obtain coal or to locate their power plants at the mouth of coal mines and mine the coal themselves when (1) the specific type of coal was extremely important to the plant and (2) unique assets had to be deployed in order to secure production because of either the rare nature of the coal or the intensive nature of extracting it from the ground. The relatively specific nature of the assets required to obtain rare forms of coal, in other words,
dictated a more secure method of production.\textsuperscript{48} When coal was relatively plentiful and less difficult to extract, however, power plants were more likely to secure the supplies necessary for production by engaging in short-term or spot contracting.\textsuperscript{49}

Aside from his empirical work on transaction cost economics, Joskow has refined the theoretical framework that Williamson put forward. While Williamson was the first to define the four types of asset specificity, Joskow has provided practical definitions for each type. He also has emphasized that asset specificity is not binary but can vary incrementally. By locating assets on a spectrum between low and high specificity, firms can outsource using long-term, near-term, and spot contracting to increase the benefits they can obtain from outsourcing.\textsuperscript{50} While these options may not allow firms to realize the full benefits of pure disaggregation, they do allow them to mitigate more precisely the risk of outsourcing, especially with respect to activities they have identified as being of high value.

Akbar Zaheer and his colleagues have focused on two other dimensions of the types of asset specificity that Williamson defined.\textsuperscript{51} The first is the knowledge and skill that individuals within the firm possess and how specific those skills are to the firm's activities.\textsuperscript{52} If the human-capital assets the firm needs to produce a good are highly specific to the process, a firm may be more likely to continue producing that good within the firm.\textsuperscript{53} The second dimension is the nature of the procedures that firms must deploy, which has a substantial impact on a firm's decision to vertically disaggregate.\textsuperscript{54} When a firm has very specific procedures that it must develop to produce certain goods, it becomes difficult for the firm to contract with third parties to obtain those goods in the market at comparable cost and quality.\textsuperscript{55}

A third consideration in the make or buy decision is the risks arising from uncertainty associated with production inside or outside of the firm. These risks include the possibility of opportunism and the existence of bounded rationality.\textsuperscript{56} Opportunism occurs when parties act in their own self-interest at the expense of others. Production outside the firm exposes it to the risk that the suppliers with which it contracts will exploit the firm's dependence on them to extract benefits beyond those specified in the original agreements. While not everyone acts opportunistically, at least some

\begin{itemize}
\item \textsuperscript{48} See id.
\item \textsuperscript{49} See id.
\item \textsuperscript{50} See Joskow, supra note 46, at 101.
\item \textsuperscript{51} Akbar Zaheer & N. Venkatraman, Determinants of Electronic Integration in the Insurance Industry: An Empirical Test, 40 MGMT. SCI. 549, 553 (1994).
\item \textsuperscript{52} Id.
\item \textsuperscript{53} See id. at 550, 561.
\item \textsuperscript{54} See id.
\item \textsuperscript{55} Alternatively, a knowledge-based theory of the firm would suggest that the reason for integration in this situation is less the cost or difficulty of using the market than the particular benefits that will accrue from producing the goods internally.
\item \textsuperscript{56} See generally Williamson, supra note 30, at 552–60.
\end{itemize}
people will, and it is impossible to assess who will do so and when.\textsuperscript{57} Bounded rationality refers to the fact that people lack the ability to process all the information available in the market.\textsuperscript{58} As a consequence, no one is able to assess every possible outcome that could result from a decision. In deciding whether to organize production internally or externally, firms must assign probabilities to the potential costs and benefits of each alternative.\textsuperscript{59} The confidence with which it can do so—or, put differently, different levels of uncertainty associated with internal and external production—may lead it to select one approach over the other.

Analyzing these considerations can help firms make rational decisions about whether to make something internally or outsource production by contracting with a supplier for goods or services.\textsuperscript{60} When uncertainty and asset specificity are low, for instance, traditional theory says that firms generally should outsource production.\textsuperscript{61} Sourcing production of various inputs to the least-cost provider can enable a firm to lower production costs and increase marginal profits on each good or service that it sells.\textsuperscript{62} In addition, a firm can be more flexible in response to changing economic conditions, adjusting the scale of its production and the amount of inputs that it must use depending on market demand.\textsuperscript{63} A firm converts what would have been a fixed cost into a variable cost, which the firm can choose to pay based on the amount of productive capacity it needs at any given time.\textsuperscript{64} Finally, a firm may free up its internal resources for more complex work, thereby expanding capacity for higher-value activities.\textsuperscript{65}

When asset specificity is high, there is a risk that outside suppliers may act opportunistically because the asset is not sufficiently fungible that it can be acquired from a large number of sources in the market.\textsuperscript{66} This raises the potential cost of outsourcing, the risk of which cannot be completely

\textsuperscript{57} Id. at 554.
\textsuperscript{58} Id. at 553.
\textsuperscript{59} See, e.g., Joskow, supra note 29, at 171.
\textsuperscript{60} Gordon Walker & David Weber, \textit{A Transaction Cost Approach to Make-or-Buy Decisions}, 29 ADMIN. SCI. Q. 373, 376 (1984). An additional consideration that sometimes is relevant is frequency of production. See Williamson, \textit{supra} note 35, at 239. When a firm produces something infrequently, it would not make economic sense for it to incur the cost of maintaining a permanent in-house operation to produce it. The firm thus is more likely to acquire the inputs to make it from other parties as needed. See \textit{id.} at 241; see also Lisa M. Ellram et al., \textit{Offshore Outsourcing of Professional Services: A Transaction Cost Economics Perspective}, 26 J. OPERATIONS MGMT. 148, 150 (2008). Scholarship in transaction cost economics generally devotes little attention to the concept of frequency, since it is the easiest aspect for firms to analyze. While the level of production activity can be plotted on a continuum, there often is a readily distinguishable line that identifies when production is frequent enough to justify internal production.
\textsuperscript{61} Ellram, \textit{supra} note 60, at 150.
\textsuperscript{62} See \textit{id.} at 148–50.
\textsuperscript{64} Klein, \textit{supra} note 63, at 200, 205.
\textsuperscript{66} Id.
eliminated by contractual provisions. Firms therefore may choose to produce internally or to engage in long-term contracting with an external producer in order to mitigate its risk. In addition, a knowledge-based theory of the firm suggests that asset specificity may make internal production especially efficient because it enables the use of firm-specific language and routines.

B. Legal Services

The economic theory of the firm suggests that the ability of law firms to decompose their services, determine which assets are firm specific, and address the risks associated with uncertainty will shape the future of outsourcing in this part of the legal services market.

1. Decomposition

Legal services traditionally have been regarded as relatively “bundled,” in the sense that they consist of tightly linked elements that cannot be easily separated. The underlying premise of this assumption is that someone with a distinct sense of legal judgment is necessary to understand how the various elements of a matter are linked together. The corollary is that persons without this perspective are likely to miss legally significant features of information.

Law firms, however, have been decomposing their work within the firm for quite some time. They delegate responsibility for discrete aspects of a case or a transaction to a variety of people, both lawyers and nonlawyers, in what we might think of as a supply chain. A major piece of litigation, for instance, involves a complex division of labor that includes preparation of and response to discovery requests; review of documents for responsiveness, relevance, significance, and privilege; preparation of deposition questions and digests of deposition testimony; briefings with experts; preparation of motions and pleadings; argument at trial; and numerous other tasks. Large transactions include people working on various aspects of due diligence, review of regulatory compliance, preparation of a multitude of interconnected documents, negotiation, and many other activities. This work may be divided among paralegals, staff attorneys, junior associates, senior associates, income partners, and equity partners.

67. See Oliver Hart, Firms, Contracts, and Financial Structure 1–14, 73–93 (1995). Oliver Hart is associated with what has become known as the “property rights theory of the firm,” which posits that firms represent a way to allocate control over assets, which serves to establish background entitlements for the purpose of negotiating inevitably incomplete contracts. He suggests that this theory shares with transaction cost analysis a concern with contractual incompleteness but that a property rights approach places more emphasis on “the idea that power is important [and] that institutional agents are designed to allocate power among agents.” Id. at 5 (footnote omitted).

Ideally, this division of labor reflects an effort to direct work to the least costly person who can perform it and to maximize use of the distinct set of skills that each person can deploy. Furthermore, the allocation of responsibility has shifted over time, as junior partners now do what senior partners used to, senior associates do work formerly done by junior partners, junior associates complete the tasks that used to be done by senior associates, paralegals take on responsibilities formerly borne by junior associates, and technology substitutes for some tasks paralegals used to do. Law firms also increasingly have begun to use contract lawyers as part of these teams. They have looked, in other words, to workers outside the firm so that they can use even lower-cost personnel to perform services, both to reduce costs to clients and to avoid high fixed overhead in the face of fluctuating demand.

In addition, as the Financial Times observes, “Across the range of initiatives implemented by law firms, there are signs of increased standardisation of the legal process. In particular, law firms are harnessing technology to a greater degree to streamline services or offer analysis that would previously have been impossible.”

Linklaters’s Blue Flag service, for instance, provides information for financial institutions on regulatory provisions around the globe. As the website for this service states, “[i]nformation is structured according to the types of financial institution, how you are regulated, where you do business, and the nature of your business. There is no more wading through statutes and rules and regulations to find what’s relevant or who to contact.” Thus, for instance, an offshore broker may be interested in selling shares in an offshore company to investors in Hong Kong. Issues that might arise could include whether the broker needs to be licensed in Hong Kong to engage in this transaction, whether it will be treated as a public offering or can be accomplished through a private placement, and what the answer

69. “In recent years, we have seen a dramatic increase in the number of ‘contract lawyers’ used in firms (i.e., lawyers hired for a particular project or set of projects without expectation of permanent employment) and that trend seems certain to continue.” Hildebrandt & Citi Private Bank, Client Advisory: January 2009, at 15–16 (2009); see also Olivia Clarke, Lawyers Fill Temporary Need for Firms, Companies, Chi. Law., Aug. 2007, at 52; Melanie Healy, Rise of the Contract Fillers, Lawyer, Feb. 20, 2006, http://www.thelawyer.com/ri5e-of-the-contract-fillers/118935.article.

70. Firms also have sought to avoid the risk of incurring excessive fixed costs when demand is irregular by handling large projects through syndication rather than internal growth. See generally Randall S. Thomas, Stewart J. Schwab & Robert G. Hansen, MegaFirms, 80 N.C. L. Rev. 115 (2001).


might be to these questions if the broker wants to sell shares in other countries.

Linklaters also uses the DealBuilder automated document assembly program for its Term Sheet Generator service, which helps bankers produce term sheets by providing interactive guidance on structuring financial transactions tailored to the needs and wishes of the parties. This service "enables bankers to create term sheets automatically at their desktops—with thousands of possible combinations—by completing a simple questionnaire."73 Wilson Sonsini also has an online venture financing term sheet that is based upon users' responses to a questionnaire.74 Eversheds's HR Contract Builder provides similar assistance to human resource professionals by automating the process of drafting employment documents.75 Allen & Overy uses HotDocs to produce tailored legal documents assembled from thousands of clause combinations, working through a set of interview questions.76 On the Mexican Wave service project, Lovells took responsibility for complex high-end work, while outsourcing more routine activities to a "group of smaller law firms that were supported by various online tools."77 These and other initiatives suggest that law firms are able to decompose certain portions of the legal advice process and produce them at relatively low cost.

The activities of law firms themselves thus suggest that it is possible to decompose legal services to a certain extent. The emergence of LPOs in recent years provides further evidence that such decomposition is feasible. Consider, for instance, the range of different activities in which CPA Global engages.78 It includes preparing summonses and complaints, interrogatories and requests for production of documents, motions, witness kits, timelines of events and exhibits, deposition summaries in various formats, memoranda of law, legal briefs, letters to third parties presenting a legal position, multijurisdictional surveys of laws, and annotated summaries of cases.79 Its document review and management services include analysis and identification of documents for due diligence purposes, materiality in litigation, and privilege in response to discovery requests.80 Contract

77. SUSSKIND, supra note 33, at 46.
management includes drafting, revising, summarizing, and analyzing contracts.\textsuperscript{81}

Pangea3, another major LPO, performs a similar range of tasks, which includes merger and acquisition due diligence reports on companies' potential or existing liabilities; drafting contracts such as nondisclosure agreements, vendor contracts, supply agreements, software license agreements, telecommunications service agreements, office leases, and internet, advertising, and media agreements; and litigation document organization and review.\textsuperscript{82} These readily divisible tasks are well suited for realizing the costs and benefits traditionally associated with transaction cost economics theory. They tend to be low in asset specificity in that they are generic functions that can be performed by a variety of law firms and other legal service providers and require only minimal firm-specific knowledge.

Nonetheless, decomposition is not a mechanical exercise. Identifying discrete components and the ways in which they relate to one another requires first that someone define the desired outputs or objectives of the activity in question. "Problems can be framed in different ways, thus generating different patterns of decomposition. Conceptual design activities are aimed chiefly at framing the problem in a specific way and, in so doing, identifying the most relevant interdependencies, to isolate them and explore alternative decomposition patterns."\textsuperscript{83} Decomposition therefore requires both analysis—in-depth knowledge of specific process steps and operations—and synthesis—a higher-level understanding of the process as a whole.

This is true even in manufacturing, which might seem an activity in which decomposition is relatively straightforward. Stefano Brusoni, for instance, describes the ways in which a project to design and engineer a chemical plant requires choices that define a particular sequence of chemical and physical transformations in order to produce certain chemical compounds.\textsuperscript{84} In the services sector, a company designing a system to respond to customer telephone inquiries will construct several different work-flow paths based on judgments about the type of problem the customer is having, its source, and the party or activity most likely to be able to address it.

Organizations also must build in the flexibility to deal with contingencies, by identifying specific steps that must be followed upon the occurrence of particular events or delegating authority to individuals to determine appropriate courses of action. In some cases, information gained in carrying out various steps may lead to a revised definition of a problem

\textsuperscript{83} Brusoni, supra note 32, at 1894.
\textsuperscript{84} Id. at 1889–901.
or a set of objectives, which may in turn require a different decomposition of tasks and activities.

Decomposition in manufacturing and service companies thus must include the capability to redefine outputs or objectives on the basis of information gained in the production process. On average, however, such companies may need to engage in this redefinition less often than providers of legal services. In manufacturing, for instance, the objective is to create a certain product. That objective will remain stable, even as unexpected developments in production may require revising the means by which it is accomplished. More ambitiously, a company may change and improve the features of a product on the basis of knowledge gained in the production process. Toyota, for instance, pioneered the organization of production as a learning system that is designed continuously to provide information that can be used in future product design. Changes in product design may then require decomposing production activity in new ways. Nonetheless, the objective of the process is concrete and relatively stable: to produce an automobile.

Similarly, the objective of a service company is to provide a relatively specific service to customers. A company involved in physical therapy, for instance, aims to help patients' injuries heal and to provide guidance on how to prevent future injuries. As new information from medical research becomes available, the company may decompose the therapeutic process in different ways. Nonetheless, despite the wide range of purposes for which people may use the Internet and the emergence of new ways to do so, an Internet service provider has the consistent goal of providing rapid and convenient access to the Web. Things admittedly become more complicated for other service providers whose customers may have more idiosyncratic objectives. Financial planners, for instance, must take into account a variety of client objectives in tailoring their services. Perhaps most of these can be evaluated according to the common metric of financial welfare, but not necessarily all of them.

This suggests that, rather than constituting a distinct category, legal services are at one end of a continuum of service providers. Clients come to lawyers with needs or problems that have a legal dimension. Good lawyers recognize, however, that legal questions are only part of a larger, more complex situation that the lawyer must appreciate in order to serve the client well. There is no established menu of outcomes with standard production processes that can be used to govern the provision of service. Instead, the lawyer is actively involved in defining the situation that the client faces and, along with the client, determining the objectives of the representation. This in turn leads to a distinctive decomposition of the

“production process” into specific activities that are connected in particular ways. “Inputs,” in other words, are not preexisting components that the lawyer selects, but are dependent on the definition of “outputs”—which are defined in different ways for different matters.

This fluidity of objectives and inputs continues throughout a representation as new information comes to light or client preferences evolve. Testimony at a deposition, for instance, may prompt a new line of argument or a new theory of a case that causes a subtle revision of objectives. This revision then may prompt redesign of the document review and legal research components of the production process. Paralegals may enter new search terms to identify material relevant to the line of inquiry that deposition testimony opened up, while junior lawyers may need to conduct research on an area of the law that previously was not regarded as relevant until the testimony. The original decomposition of activities did not include these particular tasks. It did, however, establish document review and legal research as discrete components of the representation, thus creating a flexible production process that was capable of responding to new information as the representation proceeded.

Legal services thus may not be radically different from all other services, but providing them is an activity in which continuing flexibility in defining “outputs” is an especially significant dimension of the production process. In decomposing legal services into discrete components, lawyers therefore will need to ensure that there is ongoing communication and coordination between strategists and persons performing more discrete tasks. Strategists will need to establish a division of labor or problem-solving architecture that is capable of changing inputs to correspond to redefinitions of the service that is being provided. At the same time, those persons responsible for narrower tasks, such as document review or deposition summaries, will need to know enough about the broader picture to recognize information that may prompt a redefinition of the objectives of the representation. Law firms, legal departments, and other lawyers therefore must be aware of the distinct challenges that decomposition can raise in the provision of legal services.

2. Asset Specificity

Assuming that some decomposition of services is feasible, law firms must then focus on asset specificity to determine which tasks are most suitable for completion by persons inside and outside the firm. That is, which resources are integral to the firm’s performance of its core functions and which are not? In general terms, the basic function of law firms is to provide legal services, with specific firms defining their core functions in different ways depending upon the types of practices on which they focus. Law firms confront a threshold challenge, however: it is not entirely clear exactly what constitutes legal services. The organized bar has been notoriously unsuccessful in defining the practice of law in order to exclude nonlawyers from engaging in what lawyers traditionally have done. Other
occupations increasingly are furnishing services that formerly were provided only by lawyers, such as tax advice, estate planning, organizing responses to requests for production of documents, litigation case assessment, and legal compliance monitoring. Legal process outsourcing companies are becoming involved in an expanding range of activities, which include legal research, contract analysis, preparation of questions for depositions and trial, and creation of legal documents.

The San Diego County Bar Association, for instance, has held that a firm in India was not practicing law in California when it took responsibility for conducting legal research, developing case strategy, preparing deposition outlines, and drafting correspondence, pleadings, and motions in an intellectual property dispute in San Diego Superior Court. The Bar Association noted that "[w]hen the client asked how the attorneys developed the theory on which summary judgment was granted, and had done the work so inexpensively, the attorney told him that virtually all of the work was done by India-based Legalworks." As long as the two-lawyer California law firm that engaged Legalworks retained control over the case and reviewed the draft work performed by the contractor, the Indian company was deemed to be assisting a California lawyer in practicing law in the state, not engaging in the practice of law itself.

The difficulty in defining law firm core functions raises a fundamental question: Why would a client engage a law firm rather than contract directly with LPOs or other specialized suppliers to obtain the services it needs? What do law firms offer that a client cannot obtain from a collection of providers who furnish particular types of services?

Rio Tinto, for instance, says that it will continue to turn to law firms for "strategic expertise." Law firms thus may define their core service as providing clients with a broad perspective, rather than performing discrete tasks. Increasingly, corporate clients in particular are looking to lawyers not simply for information about the law, but for practical judgment that takes into account a wide variety of business, reputational, and political considerations.

Parties other than law firms, however, can furnish this service. For example, one reason for Rio Tinto's arrangement with CPA Global is that it frees up inside counsel to take on more strategic work. Lawyers inside the company, in fact, may be in a better position to do this work than law firms are, since Rio Tinto's lawyers know the company better and, at least theoretically, have interests more aligned with a client that is their employer. Furthermore, lawyers have no monopoly on the ability to provide such advice. Companies may call upon bankers, management

88. Id.
89. Breaking New Ground, supra note 1, at 15.
consultants, large accounting firms, or communications companies to help analyze and devise strategies for dealing with complex situations.

Law firms will need to articulate reasons why clients should turn to them rather than other professionals for such assistance. This will require them to think more deeply about what constitutes judgment and how it can be nurtured. Will they be able to inculcate judgment in their lawyers in an age of increasing specialization? To what extent will law firm lawyers have opportunities to cultivate a wide-ranging sense of judgment when many of them work on specific projects that may give them only a narrow perspective on the client? An individual firm will not only need to consider these questions, but also identify how its answers distinguish the firm from its competitors.

Even if a firm is able to develop a core function that consists of providing wise judgment, this is an activity that is unlikely to support law firms of the size that many have become. How might firms of 1000 or more define their core activity? One claim might be that they are able to provide efficiencies of scale and scope that make it more profitable to turn to them rather than to a group of separate suppliers.

Firms may not be currently organized, however, to achieve this advantage. Specifically, what incentive do firms have to be efficient when their pricing model is based on hourly billing? Increasing efficiency in providing a service means either doing a given amount of work in less time, or more work in a given period of time. In the first scenario, however, the time that is saved must be billed to some other project in order to avoid a decline in revenue. Likewise, in the second scenario the time that would have been allocated to performing the additional work must now be filled with other projects or the firm’s revenue will drop. Under an hourly billing system, in other words, efficiency does not necessarily pay off for the firm.

One important predicate for a large firm credibly to maintain that its size enables it to provide services efficiently thus seems to be that it uses a pricing model based on fixed fees, a specific budget, or some variant of this approach. This in turn will lead a firm to place more of a premium on building organizational capital—routines, procedures, and ways of doing things that enhance the ability of firm members to provide service efficiently. To the extent that firms move toward this model, they may be better able to offer a distinctive reason for clients to use their services.

Alternatively, large law firms may argue that they are well-suited to serve as project managers for matters on which clients use a variety of specialized suppliers. This function could be of growing importance if clients continue to have a demand for large, complex projects.90 We will defer detailed discussion of their ability to play this role until later in this article.91 Suffice it to say at this point that most lawyers are not trained in the skills necessary to serve as project managers, nor do law firms currently have as

90. See Thomas et al., supra note 70, at 138-42.
91. See infra Part II.A.2.
much experience as accounting, consulting, or engineering firms in coordinating projects that involve a large number of separate parties. Successfully defining project management as a core law firm function, therefore, will require firms to develop more expertise in tasks to which they traditionally have not systematically devoted attention.

As a result, a given law firm may be able to engage in an analysis of asset specificity by determining what core activities distinguish it from other firms. This process will provide some guidance on which functions to perform within the firm and which to outsource to independent suppliers. In the long term, however, the firm will need to provide a persuasive explanation of how the services it offers are distinctive compared to those available from a wide range of organizations beyond other law firms.

3. Risks

Even if firms are able to decompose their work to a significant extent and determine which portions should be done inside and outside the firm, they must deal with the risks that outsourcing can pose. A firm that outsources some functions is surrendering some degree of oversight and creating a measure of dependence on a contractual party. This practice creates the risk of both lapses in quality and supplier opportunism, since “[t]he outsourcing vendor controls the activity, while the outsourcing firm ‘owns’ the result.”

Concern about poor performance by outside suppliers may be especially acute for law firms because of their belief that reputation is an important consideration for clients in selecting firms in a highly competitive market. Sociologist Joel Podolny defines reputation as “an expectation of some behavior or behaviors based on past demonstrations of those same behaviors.” Reputation can be especially valuable when it is difficult for consumers to evaluate the quality of a good or service. In that situation, a consumer may give significant weight to a producer’s past behavior and how others have assessed it. It can be hard for a client to evaluate the quality of legal services that firms are likely to provide, especially when several firms seem able to do the work. An unblemished reputation may make the difference in some cases. It is an asset that can be threatened when firms rely on outside providers; a single botched assignment could damage the firm’s reputation for high-quality work in comparison to that of its peers. As professionals trained to anticipate and advise on how to

92. Geis, supra note 24, at 962.
94. This is true for professional services generally. As Jay Lorsch and Thomas Tierney observe, “it is exceptionally difficult to measure the quality of professional services, much less the actual value they add. In many client relationships, the professionals work so closely with their client counterparts that it’s hard to say at the end of the day who did what, client or service provider.” JAY W. LORSCH & THOMAS J. TIERNEY, ALIGNING THE STARS: HOW TO SUCCEED WHEN PROFESSIONALS DRIVE RESULTS 17 (2002).
control risks, lawyers may be loath to relinquish the control that ostensibly comes from having tasks performed within a single organization.

Increasing sophistication in outsourcing arrangements may assuage this concern to some extent. George Geis suggests that outsourcing has grown significantly in the last several years in part because of the emergence of various ways in which firms can address agency costs. One such strategy, for instance, is staged contractual commitment, whereby firms initially outsource only a small amount of work and keep contracts relatively brief in duration. As time goes on, and the outsource service provider shows itself to be more trustworthy, contract length tends to expand, as does direct monitoring of the outsourced projects. Other approaches include inducing competition and enhancing evaluation by performing some of the work inside the firm, or contracting with multiple suppliers; providing financial incentives to meet certain performance benchmarks and achieve cost savings; and providing for explicit monitoring, control, and exit rights. Finally, a firm may decide to take ownership of a “captive” outsourcing company. This can significantly lessen concerns about quality and potential opportunism, as well as achieve cost savings, but does not give a firm the full benefits of being able to adjust its workforce in response to variations in demand.

Finally, even if quality of service is not an issue, law firms may be wary of outsourcing because of concerns about status. While reputation represents expectations based on past behavior, status reflects an actor’s position in a hierarchy of value. Honda has a reputation for producing high-quality automobiles, for instance, but it has a lower status than Mercedes among automobile companies. Podolny suggests that consumers use status to evaluate a good or service when “the existence of a reputation for a valued quality does not necessarily eliminate the uncertainty that market participants have about the presence or extent of that valued quality.” The greater the uncertainty about a firm’s product, the more likely the consumer is to infer quality from status. Imagine, for instance, that a passenger is given the choice of flying on an airplane manufactured by Mercedes or by Honda. Both companies have reputations for producing vehicles of good quality. The passenger is likely to choose the plane manufactured by Mercedes, however, because of its higher status, from which she infers superior airplane quality.

A crucial feature of status is that it is dependent on associations and relationships with others. Those of high status (and those who aspire to it)

96. See Geis, supra note 24, at 984–89.
97. See id. at 988.
98. Id. at 983–84.
99. Id. at 965–66.
100. Podolny, supra note 93, at 13.
101. Id. at 18.
are careful to associate only with those of comparable status. If a high-status actor associates with a low-status one, the former loses status while the other gains it. Tiffany & Co., for instance, preserves its status by selling only certain items made by particular producers. It would risk losing status if it began to sell plastic necklaces, or jewelry by manufacturers whose goods are sold at Wal-Mart, despite the fact that its reputation would suggest that these products would be of high quality.

Status traditionally has been important to law firms because of the difficulty in assessing the value of legal services. Law firms who seek to attain or maintain high status, for instance, will eschew or abandon certain practice areas because they are not regarded as sufficiently prestigious. One example is Dechert LLP, which decided to let its state tax practice go, even though it was generating $10 million a year in revenue. The reason was because the practice was not seen as compatible with the firm’s goal of being one of the ten to twenty firms that would represent the world’s largest companies in their most important matters. It is not hard to imagine that some firms might be reluctant to engage in outsourcing on their own initiative for fear that openly associating with companies who do routine or commodity work will tarnish their status.

This reluctance may fade, however, for two reasons. First, clients are devising ways of evaluating many law firm services. To the extent that this reduces uncertainty about quality, clients presumably will rely less on status as a basis for their selection of firms. Second, prestigious law firms such as members of the Magic Circle and others have begun to rely more substantially on outsourcing. Indeed, Clifford Chance recently announced that it was hiring two lawyers from its legal support center in Gurgaon as associates in the firm. This suggests that firms may be able to engage in this practice without suffering a diminution in status, because

102. See Julie Triedman, Top Design, AM. LAW., May 2007, at 135. It is true that the firm could not charge fees for state tax work that are as high as those for high-end corporate work, but there is a close relationship between price and status in which it is difficult to tease out which variable causes the other.


104. Clifford Chance Promotes Two Lawyers from LPO into Firm, LEGALLY INDIA.COM, Nov. 23, 2009, http://www.legallyindia.com/20091123301/Legal-Process-Outsourcing-LPO/Clifford-Chance-promotes-two-lawyers-from-LPO-into-firm. The two will join the firm at the level of newly qualified lawyers. Id. One will work with the firm’s Abu Dhabi capital markets team, while the other will work in the banking group in London. Id.
outsourcing is becoming a standard expectation of clients. It does remain to be seen, however, whether firms whose brands are less established will be able to take the initiative without any loss of status.

4. Summary

Law firms appear able to some degree to undertake the decomposition of their services that scholarship on the make or buy decision indicates is necessary for outsourcing. Clients and LPOs will provide both templates and competitive incentive for firms to expand these efforts. Fluidity in defining legal service outputs—and therefore inputs—may require especially close ongoing integration of decomposed services with more complex activities. In addition, the relevance of asset specificity will require law firm leaders to devote more attention to the question of what distinctive services law firms in general and their own firms in particular can provide.

Finally, uncertainty about the performance of outside suppliers may lead firms in the near future to conclude that relying more on “captive” rather than independent LPOs is worth the lesser flexibility in adjusting the size of their workforces. For some firms, the concern may be sufficiently weighty that they prefer to hire lawyers in staff or specialist positions in the firm rather than rely much on LPOs. Client preferences and perceptions, however, are likely to shape this decision to a significant degree. If clients become more comfortable with the use of LPOs, they may begin to insist that law firms use them more often. Firms also may believe that clients are starting to rely more on metrics than reputation or status in evaluating law firm services, which may ease their concern about using LPOs.

Assessing the potential future relevance of the make or buy decision for law firms thus will require much sharper focus on the components that constitute the provision of legal service. Furthermore, the relevance of asset specificity to the outsourcing decision may lead to fundamental questions about the nature of legal work. This analysis may in turn result in the realization that many of the activities associated with providing such services can be performed by nonlawyers, and that this universe may be expanding. This suggests that the impact of outsourcing on lawyers’ understanding of the services they provide, on their professional identity, and on legal education may be especially fruitful areas of research.

As manufacturing and service firms have engaged in more outsourcing, researchers have identified specific challenges that arise when production extends beyond the boundaries of the firm. The next part discusses some of these challenges, which law firms will need to take into account in determining which activities might be suitable for outsourcing.

II. EMPIRICAL RESEARCH ON DISAGGREGATION

Empirical work in several disciplines has identified a number of issues that arise for organizations as the make or buy decision becomes a
potentially more salient feature of their operations. Much of this work has focused in particular on the implications of relying on outsourcing as an integral part of the production process. This section discusses research on the challenges of ensuring that work performed outside the firm is fully integrated into the production process; coordinating projects for which networks of organizations are responsible; managing the transfer of knowledge inside and outside of firms that are participants in a supply chain; and addressing the impact of using contingent workers on an organization’s workforce, structure, and culture. A review of this research suggests considerations that law firms will need to assess if they begin significantly to extend the process of providing services beyond their formal boundaries. Discussing the research also is intended to introduce concepts that may become increasingly relevant to law firms but that currently are not commonly used to analyze their operations. Considering how these concepts are applicable to law firms may prompt us to rethink how to conceptualize these firms and what they do.

A. Process Integration

1. Overview of Research

One motive for moving from vertical integration to greater reliance on supply chains of multiple outside providers is to reduce fixed overhead costs. Companies that move in this direction reduce the cost of retaining employees in charge of supervising the production of inputs. They turn to vendors as an alternative, to obtain components designed to meet the company’s specifications. This option gives them the flexibility to reduce costs when demand wanes or technology changes by cutting back on orders from suppliers, rather than incurring the costs connected with laying off employees on the payroll.

Firms can gain this advantage by establishing a supply chain, but they need to appreciate that this model of production does not eliminate the need for personnel who can coordinate activities among members of the chain. The absence of such coordination can make production more expensive and prone to error than if the company had retained the fixed overhead costs associated with remaining more vertically integrated. Vertical disintegration thus is not simply a process of hollowing out the permanent workforce and replacing it with outside contractors. As three scholars have observed, “disintegration . . . can be viewed as the ‘other side of the coin’ of systems integration. Firms can only outsource if they acquire the capability to integrate the components, knowledge, or software then produced by their specialist suppliers and subcontractors.”

In manufacturing, for instance, some theorists suggest that the creation of modular components and standard protocols that specify how they relate to

one another minimizes the need for any overarching managerial authority over the process. The argument is that the transfer of codified information embedded in components of the production chain can smoothly coordinate decentralized activities. In this way, the "modular architecture" of the production process ostensibly obviates the need for traditional oversight.

Critics of this view point out, however, that there are limits to the ability of modularity to substitute for managerial coordination. "[T]he 'digitizing' of a product's characteristics by designers involves simplification, and digitized models must subsequently be 're-actualized' by the human teams responsible for production." As a result, "many production processes still require close personal contacts involving the transfer of tacit knowledge." Furthermore, even if a production process could be completely modularized, it would operate as a closed system incapable of adjusting to new circumstances. Firms need the ability to modify production in response to changing conditions and new information. Echoing a point made earlier, higher-order problem solving capacity is necessary in order to decompose production in new ways with different modules in order to respond to such challenges. While firms may reduce the number of components that they directly produce, they need to retain a broad base of knowledge in order to engage in ongoing problem solving. In other words, they need to "know more than they make."

Moving beyond the coordination and design of components that a company outsources, integration also requires the capacity to determine what activities at various steps of the supply chain should be produced internally or by outside vendors. Advances in information and communications technology mean that firms increasingly are engaged on an ongoing basis in make or buy decisions. The ability to make these decisions requires a broad perspective on the firm's strategies and needs, for which the information embedded in a modular production process cannot substitute. Having such a broad perspective "enable[s] firms to move selectively up- and downstream in the marketplace through the simultaneous 'twin' processes of vertical integration and disintegration," so that they can "gain the advantages of both outsourcing and vertical integration through different phases of the product life cycle."

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107. Hobday et al., supra note 105, at 1127.
108. Id.
109. Stefano Brusoni, Andrea Prencipe & Keith Pavitt, Knowledge Specialization, Organizational Coupling, and the Boundaries of the Firm: Why Do Firms Know More Than They Make?, 46 ADMIN. SCI. Q. 597, 597 (2001); see also Ove Gransstrand, Pari Patel & Keith Pavitt, Multi-technology Corporations: Why They Have "Distributed" Rather Than "Distinctive Core" Competencies, 39 CAL. MGMT. REV. 8, 22–24 (1997) (noting that large firms are more diversified in technologies that they master than in the products that they make).
110. Hobday et al., supra note 105, at 1111 (footnote omitted).
The capability to engage successfully in this process is becoming an important asset for many leading companies. As one scholar puts it with respect to offshoring, for instance, "the knowledge and skills associated with the complex activity of determining which services to offshore outsource, where, to whom and how to structure the relationship may be an important source of competitive advantage . . . that the firm should protect, just like any type of intellectual property."\(^{111}\) Furthermore, some companies not only cultivate these skills for their own activities but are developing project coordination and integration expertise that they can market to other companies.

Some research suggests that lead firms may need to maintain a significant capacity to perform work inside the firm in order to integrate effectively activities by multiple providers on a project. In construction projects in which tasks within a stage are highly interdependent, for instance, one study indicates that there are fewer cost overruns in a stage when the lead firm does most of the work in that stage than if a contractor does so, or the work is evenly divided between the lead firm and the contractor.\(^{112}\) When stages are highly interdependent, this division of work has the same impact on cost overruns in subsequent project stages. The authors conclude, "[W]hen the bulk of highly interdependent activities were performed outside the owners’ firm boundaries, owners experienced the most problems controlling projects and, as a result, experienced the highest cost overruns."\(^{113}\)

More generally, the authors note that in other sectors "coordination and control issues arising from the division of work and responsibilities across organizational boundaries have been blamed for a plethora of highly visible project failures and challenges."\(^{114}\) In complex projects with interdependent phases, coordinating work among organizational units requires considerable information-processing capabilities. The challenge is magnified because outsourced activities in such projects generally do not provide standard products or services but are customized for the project. This means that the information that must be exchanged tends to be idiosyncratic. Furthermore, the larger the number of participants in the supply chain, the greater the "extended interorganizational negotiation [that] will be necessary to resolve disagreements."\(^{115}\)

Moving from vertical integration to greater reliance on a supply chain, therefore, may result in a reduction in a firm’s permanent workforce, but the firm must have the capacity to integrate the work of multiple producers without the benefit of a single organizational hierarchy. In addition, there

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111. Ellram et al., supra note 60, at 160–61.
113. Id. at 24.
114. Id. at 7.
115. Id. at 8.
may be some cases in which effective integration requires that the firm retain the ability to perform a substantial amount of the work itself. For these reasons, a less vertically integrated firm cannot afford simply to be a hollow organization that delegates responsibilities to contractual partners.

2. Law Firms

To the extent that disaggregation becomes more common in legal services, process integration capability will become increasingly important. Richard Susskind suggests,

[I]n the future, one individual organization will, I believe, tend to take overall responsibility for the delivery of the completed and delivered legal service when multi-sourced, even though several organizations and systems may have contributed. This organization may be a form of main contractor, acting as the overall project manager of the service, and so coordinating all the various inputs. This contractor will lend its brand to the exercise, thus securing the confidence of the purchaser. And, further, this contractor-manager will establish quality systems and procedures to ensure that the work is undertaken to an appropriate standard.\footnote{116. Susskind, supra note 33, at 50–51.}

This development could create market opportunities for law firms. Some global law firms, such as the Magic Circle firms, may already provide this service for large transnational matters. Other law firms that develop this capability could follow. Susskind points out, however, that other types of organizations could do so as well, such as large accounting, software, or publishing firms. In the latter scenario, law firms might “be relegated to the function of technical legal subcontractor.”\footnote{117. Id. at 51.}

Even on the more modest scale of individual projects, law firms may need to develop better project management skills than many currently possess. Lawyers generally receive no exposure to management principles in law school, and few of them receive any systematic training in law firms. Lawyers who serve in management positions in firms usually do so on the basis of their work as practicing lawyers, since there is no established track within firms for attorneys who are interested in moving into positions of authority. Lawyers who coordinate the work of litigation or transactional teams also tend to be successful lawyers who have good relationships with clients, rather than those who have demonstrated the ability to manage projects. The qualities that are valuable in building a successful law practice are not necessarily those that make for an effective manager.

Furthermore, to the extent that lawyers do have experience in coordinating the work of project teams, those teams largely consist of members of the same firm. In these situations, lawyers can rely on a hierarchical structure of authority to manage the work of team members. While increasing disaggregation is creating teams with more diverse organizational affiliations, lawyers generally have only limited experience
coordinating the work of a large number of service providers across multiple organizational boundaries.

Firms in recent years have hired increasing numbers of nonlawyers in administrative positions within the firm. These employees could be in a position to assume project management responsibilities. Currently, however, they mainly help manage the business side of the firm, working on financial or strategic planning rather than exercising any oversight over project teams. The fact that they are not lawyers might make it difficult for them to assume the latter responsibility, since many lawyers may resist any effort by a nonlawyer to direct any of their work. Indeed, ethical rules are designed to limit the ability of nonlawyers to influence a lawyer's provision of legal services to a client. Rule 5.4(d)(2) of the ABA Model Rules of Professional Conduct, for instance, states that a lawyer shall not practice in an organization in which a nonlawyer is a corporate director or officer or occupies any similar position of authority. We may need to rethink such rules so that they apply only to efforts to influence a lawyer's professional judgment, rather than to those cases in which a nonlawyer is in a position of authority over a team that contains lawyers among its members.

B. Networks

1. Overview of Research

Another aspect of pressures toward disaggregation is the emergence of networks as the locus of production in many economic sectors. Traditionally, the production process occurs within a single firm, orchestrated by a command and control decision process based on organizational rules. As transaction costs of exchanges with outside parties decline, firms may turn more to markets to obtain inputs that formerly were produced within the firm. Relationships among actors in such cases are organized by contract. In Williamson's terms, firms rely to varying degrees on hierarchies and markets as ways of organizing production.

With advances in information and communications technology, companies increasingly can rely on a variety of specialized outside firms to produce various components, with the lead company assuming the role of assembling the final pieces or simply marketing the product to end users. As Walter Powell puts it, more and more firms are involved in an "intricate latticework" of collaborations with outsiders that spreads the core activities of the firm across a wider array of participants. This process of vertical disintegration creates a supply chain that often stretches across the globe, as

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119. WILLIAMSON, supra note 31, at xi.
120. Powell, supra note 10, at 58.
companies seek out the firms that are the most cost-efficient and innovative to furnish various links in the chain.\textsuperscript{121}

The relationships that emerge in this process extend across the boundaries of any single firm. At the same time, they involve a degree of collaboration, cooperation, and ongoing reliance that distinguishes them from standard arms-length transactions in the spot market. Firms deal with one another based on expectations of continuing involvement, equipped with distinctive knowledge about each other's operations and requirements. This can both enhance productive efficiency and provide the foundation for innovation as new technologies, needs, and markets develop. As a consequence,

fixing the boundaries of an organization becomes a nearly impossible task, as relationships with suppliers, subcontractors, and even competitors evolve in unexpected ways. As these network ties proliferate and deepen, it becomes more sensible to exercise voice rather than exit. A mutual orientation between parties may be established, based on knowledge that the parties assume each has about the other and upon which they draw in communication and problem solving. Fixed contracts are thus ineffectual, as expectations, rather than being frozen, change as circumstances dictate.\textsuperscript{122}

As the interorganizational network becomes a basic unit of analysis, firms respond by entering into relational contracts that intentionally leave some terms open and subject to mutual definition by the parties as circumstances evolve. In other words, they do not rely wholly on either hierarchies or markets to organize production.

Perhaps the paradigmatic form of a network is the Japanese vertical \textit{keiretsu}, found in both the manufacturing and services sectors.\textsuperscript{123} This is a group of several hundred companies organized under the aegis of a single final assembler or service provider. The most successful industries that employ this form are automobile and electrical equipment companies. Group members consist mainly of two types of companies: first, those that formerly were divisions or departments of the lead firm, which have been spun off as separate companies, and, second, formerly independent companies that have developed a long-term relationship with the lead firm, often as a supplier.

In the manufacturing sector, the lead firm focuses on high-end manufacturing, consisting mainly of final assembly, and on research and development for core businesses of the \textit{keiretsu}. Other firms produce and assemble components by using simpler subcomponents produced by other affiliates that comprise a supply chain spanning the formal boundaries of several organizations. While group members are preferred suppliers, the

\textsuperscript{122} Powell, \textit{supra} note 10, at 59.
lead firm also obtains some components from companies outside the keiretsu. This practice "disciplines pricing on both sides" and permits suppliers to "build larger scale economies than would be possible for a captive supplier."124

The keiretsu is only the most prominent example of how disaggregation and multisourcing is leading to the demise of the vertically integrated firm in several industries. This trend is most evident in sectors subject to rapid technological change, where companies need to retain flexibility and avoid incurring significant overhead costs for processes or products that may become obsolete. Such a development can change the nature of competition itself, since "selection increasingly operates at the network level as rivalry shifts from firm-versus-firm to coalition-versus-collaboration."125

2. Law Firms

Within the legal services sector, corporate legal departments have done more than law firms to utilize the network as a unit of production. These departments regularly must decide whether to make or buy legal services and have outsourced work to law firms for many years. They use a variety of outside firms to provide legal services to their companies, typically relying on different firms for expertise in particular specialties. In recent years, corporations have begun to reduce the number of outside firms they use, creating preferred provider networks consisting in some cases of a handful of firms.126 In return for a guarantee of a certain amount of business, firms who win the competition to participate in these networks agree to share work product with all other preferred firms and to work with the client to explore fee arrangements that provide predictable legal costs, create incentives for efficient service delivery, and assign to the firms some of the risks of the representation. Such a network reflects reliance on relational contracts to govern relationships that are neither wholly located within the company nor simple arms-length spot market transactions.

Corporations also have been the most active users of LPOs, sending considerable amounts of routine legal work to vendors in lower-cost locations such as India and the Philippines. Many insist that their outside law firms utilize such vendors in their representations of the company, and some clients designate particular LPOs that firms must use. In this way, corporations begin to construct supply chains consisting of a variety of outside entities that focus on discrete aspects of a given legal representation.

Efficiency pressures have begun to move law firms in recent years to look outside their organizations for providers who can perform specific tasks connected with representation. Firms increasingly use contract

124. Id. (citation omitted).
125. Powell, supra note 10, at 68.
126. See David B. Wilkins, Team of Rivals? Toward a New Model of the Corporate Attorney-Client Relationship, 78 FORDHAM L. REV. 2067 (2010).
lawyers for relatively routine work that used to be done by associates, and are likely to use them even more in the future to avoid the excess capacity that has required layoffs at many firms during the recent recession. Firms are also using LPOs for services such as document review, factual analysis, and legal research. Furthermore, the complexity and expense of electronic discovery has led a large number of firms to rely on e-discovery vendors and information technology specialty companies as key members of litigation teams. Firms also may assemble lawyers from more than one firm to handle large litigation or transactions, with each firm focusing on a particular aspect of the engagement, such as discovery, settlement, or courtroom advocacy. When a matter raises issues in a jurisdiction in which a firm does not have an office or a substantial presence, the firm may rely on a referral network to identify someone who can work on that aspect of the matter.127

Corporate legal departments will likely continue to use networks for the provision of legal services more frequently than law firms. First, they are part of larger business organizations in which outsourcing is both accepted and encouraged. Second, as is any business unit of a company, they are subject to continuing pressures to hold down costs and operate efficiently. Their current reliance on networks is a direct response to these pressures, reflecting the opportunities that advances in communications and information technology have made available. The goal of achieving efficiencies also has prompted departments to develop more sophisticated benchmarks and metrics to use in evaluating, pricing, and monitoring the provision of legal services, expertise that will be useful as the trend toward disaggregation continues. Finally, legal departments are regarded as cost centers or support functions within the larger corporation, as opposed to activities that constitute the core of a company's business. Conventional management theory argues that such noncore functions are especially suitable for make or buy decisions.128

Continuing and perhaps increasing use of networks by legal departments means that corporate counsel may begin to function more as general contractors who coordinate activities among a multitude of suppliers that make contributions at various points in the legal services value chain. If so, project management skills will become more important for such lawyers, as will the ability to structure governance arrangements that align incentives as much as possible among network members. Departments may also turn more to nonlawyers with such skills, much as many have come to rely on corporate procurement officers in negotiating the terms of law firm engagements.

Law firms also are likely to rely more on networks to provide legal services in response to increasing pressure from clients to be cost-efficient.

127. The Lex Mundi network of 21,000 lawyers in 160 firms around the world is the most extensive such network. See Lex Mundi, http://www.lexmundi.com/lexmundi/Default.asp (last visited Feb. 28, 2010).
128. See Sako, supra note 9, at 3–4.
There may be features of law firm practice, however, that limit how extensive these networks become. First, of course, legal services are a core function of a law firm, not support services. While there are some exceptions, conventional management theory generally maintains that an organization should be cautious in outsourcing such an activity.

Second, as our previous discussion has suggested, law firms may have some concern that contracting with outside vendors to help provide services will undermine their reputation and status. They may fear that using more outside suppliers runs the risk of damaging their reputation because of the difficulty in ensuring that such providers deliver exemplary service. They may also be wary that association with entities that do commodity work will diminish their image of providing services that require irreducible intellectual sophistication and complex judgment.

Law firms may be especially concerned about their ability to supervise vendors adequately because of the risk that contractors could be charged with the unauthorized practice of law. LPOs are now engaged in activities that lawyers performed a decade ago or less. They avoid unauthorized practice claims by maintaining that they compile and synthesize information that lawyers use in providing legal services. This characterization is tenable as long as lawyers are involved in supervising the work of contractors. State bar authorities vary in their approach to unauthorized practice, however, which creates uncertainty about the level of supervision deemed adequate and the extent of contractor discretion that is deemed sufficient to avoid violating bar rules.

One final consideration that could limit law firm reliance on networks is that decisions about staffing tend to be made in firms on a decentralized basis by partners in charge of the various matters that the firm handles. To the extent that firms currently rely on networks, these networks tend to exist for specific projects and may not continue for matters involving different lawyers or clients. The use of networks as a unit of production thus varies among lawyers and practices within a firm, with origination and engagement partners likely to be most influential in determining whether to create and rely on them.

This can make it difficult for a firm to pursue a consistent policy regarding the use of outside service providers. Individual partners’ willingness to work with providers will vary, and will be influenced significantly by a client’s attitude toward such collaboration. The extent to which this continues to be an obstacle will depend in large measure on how widely clients insist on fee arrangements that depart from hourly billing and create incentives for efficient delivery of services. If these arrangements become common practice, they could generate the support from influential partners that law firm management needs to implement a standard approach to the creation of networks to provide legal services.

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129. See supra notes 93–104 and accompanying text.
In sum, as disaggregation of legal services continues, we may see some vertical disintegration among providers who rely more on a network of outside parties to obtain the inputs they need to deliver services to clients. This trend may be especially prominent among corporate legal departments, who have both comfort and expertise with it. While law firms may be more cautious, efficiency pressures and greater client reliance on metrics, rather than reputation and status, in selecting outside firms may begin to lessen their resistance.

C. Knowledge Transfer

1. Overview of Research

Two scholars of outsourcing suggest that “the most significant impact of contingent work may be on the knowledge stock of the firm and, through that, on its long-term competitive position.”\textsuperscript{130} Outsourcing can result in the transfer of knowledge into the firm from outside suppliers who provide access to emerging best practices and innovative approaches to producing goods and services. It also can create the risk that knowledge that constitutes part of a firm’s competitive advantage will be disclosed to outside parties and the public at large. Firms therefore ideally structure outsourcing arrangements so as to maximize the likelihood of acquiring new knowledge that they can convert into an organizational asset and to minimize the prospect that the firm will transfer knowledge to parties outside the firm that can jeopardize its competitive position.\textsuperscript{131}

Sharon Matusik and Charles Hill provide a taxonomy of knowledge that helps clarify the opportunities and risks a firm may encounter when involved in outsourcing. They first distinguish between private knowledge that is unique to a firm and public knowledge that is not. The latter includes items such as industry and occupational best practices and language skills. It cannot serve as a source of competitive advantage because it is available to all firms, but a firm’s failure to use it can put it at a disadvantage.

A firm’s private knowledge consists of components and architectural knowledge. Components relate to discrete aspects of an organization’s operations, such as processes for new product development, inventory management, and customer billing. It may be explicit or tacit. The former is codified and transferable in formal systematic methods, such as rules and procedures, and the knowledge and skills associated with it easily can be taught or written down. The latter is learned through experience and difficult to articulate, formalize, and transfer smoothly to others. Knowledge of components may be held on the individual or collective level.


\textsuperscript{131} See generally Ellram et al., \textit{supra} note 60; Matusik & Hill, \textit{supra} note 130.
By contrast, architectural knowledge consists of organization-wide routines and schemas for coordinating various components and putting them to productive use. It is held tacitly and collectively, since no one individual is in a position to see, comprehend, and describe the totality of this form of knowledge. Component knowledge is embedded within and influenced by architectural knowledge and can be upgraded by architectural knowledge over time. As an example of the latter process, Matusik and Hill suggest that Toyota’s architectural knowledge base emphasizes continual improvement in component processes through ongoing feedback on performance, which in turn regularly results in improvements in discrete components. They argue that “over the long run it is architectural knowledge that contributes most to an organization’s long-run competitive position.”

Outsourcing partners can be an important source of new public and private knowledge for a firm. As an example of the former, outside workers may expose a firm to new best practices by virtue of working on projects with a variety of firms. Their work in a number of different organizational settings may increase their depth of knowledge about such practices. They may be especially likely to be familiar with the most current ways of doing things since their skills tend to be evaluated by the market more often than those of employees who work for a single firm. Outsourcing arrangements, therefore, may serve to provide firms with access to new public knowledge in the form of industry- and occupation-specific best practices that are available to their competitors.

Outside workers also may stimulate the creation of new private knowledge within a firm. Matusik and Hill suggest three ways in which this may occur. First, outside workers may be more likely than firm employees to try new processes and develop ideas that are “outside of an organization’s repertoire of routines.” Second, the presence of new workers may prompt employees to make tacit knowledge more explicit as they explain to outside workers how things are done, thereby allowing a firm to draw on and disseminate routines and practices, as well as to reexamine them. Finally, outside workers may bring into the firm public knowledge, which is combined with existing private knowledge to create new ideas and practices. In scientific invention, for instance, “[t]he fusion of formerly distinct technologies into new ones is a recognized source of innovation.”

132. Matusik & Hill, supra note 130, at 685. See generally LIKER, supra note 85.
134. Matusik & Hill, supra note 130, at 687.
135. Id. at 688.
Mere exposure to new knowledge, however, does not ensure that a firm will be able to convert it into an organizational asset. Matusik and Hill observe that, "[b]ecause grafting knowledge from the outside environment does not take place automatically, a firm needs mechanisms to bring public knowledge in, to transmit this knowledge within the firm, and to fuse the new knowledge with existing stocks of knowledge."¹ Such integrative mechanisms may include the creation of "boundary spanning" positions that serve as liaisons between the firm and outside suppliers, officially developing a strategy and committing resources explicitly for the purpose of obtaining new knowledge from outside partners, providing incentives to employees to acquire and use new knowledge, and encouraging outside workers to share information by providing rewards that may include the possibility of permanent employment with the firm.

Firms also may need to take steps to overcome employee perception of the inferiority of contingent workers in order to enhance the flow of knowledge into the firm. These steps may include creating teams of permanent and outside workers in settings that involve interdependence, as well as high-profile announcements of ways in which the acquisition and integration of outside knowledge has improved the performance of the firm. Firms concerned about lessening devaluation of outside workers will need to be rigorous in dismissing such workers who do not have the necessary skills and knowledge base.

Outsourcing also creates the risk that a firm's stock of private knowledge will be disseminated outside the firm. Disclosure is likely to be of component knowledge, since outside workers are more likely to be exposed to knowledge related to specific tasks than to a company's entire repertoire of routines, and because architectural knowledge cannot be grasped fully by any one individual. As private component knowledge is converted into public knowledge, a firm may lose an important competitive asset. Other firms may simply copy the knowledge. They may, for instance, adopt certain procedures or employ particular analytical techniques that enhance productivity. In attempting to imitate, they also may innovate. Such innovation can render obsolete the knowledge that has been disclosed outside the firm. In addition, if a supplier comes to know aspects of a business better than the lead firm, it may expand its operations and become a competitor.¹³⁷

These concerns indicate that firms should take explicit steps to minimize the risk that outsourcing will result in the transfer of private firm knowledge to competitors and the public. Such steps can include using nondisclosure agreements; restricting access to manuals, documents, and sensitive information; segregating sensitive functions and activities from outside workers; monitoring the type of knowledge that suppliers obtain; and limiting the length of contingent worker contracts or converting such

workers to permanent employees if they acquire important firm-specific knowledge. Matusik and Hill also suggest that as outsourcing becomes more prevalent, especially in sensitive professional and technical areas, reputational markets may become important as constraints on dissemination of private information by outside workers.  

Another risk of outsourcing connected with knowledge transfer is related to the concept of asset specificity discussed earlier. A firm may require that certain forms of knowledge be developed that are tailored specifically to its operations. An organization that relies on outside suppliers to develop this knowledge without significant involvement by the organization’s employees can become dependent on a supplier and make itself vulnerable to opportunism. This is especially a risk if the knowledge that the outside party acquires is tacit knowledge, which is “gained in a learning-by-doing mode” and is “difficult to recreate and transfer.” As a result, economic theory suggests that the more firm-specific an asset, the less likely a firm is to rely on outsourcing to obtain it.

Some research suggests, however, that firms may not be as sensitive to this risk as they should be. Interviews with a group of high-ranking corporate procurement officers led researchers in one study to conclude that firms “are careful to avoid outsourcing of specific physical assets, but do not show the same level of concern for outsourcing specific knowledge assets.” They describe two examples in which firms outsourced tasks that required the acquisition of high levels of firm-specific knowledge. In one case, a software company spent more than four weeks training its offshore call center workers how to respond to highly technical questions related directly to its product. This type of knowledge is costly to develop and cannot be recovered if the firm decides to use a different supplier. Yet the firm chose to rely on outside workers rather than employees to acquire and apply the knowledge.

Another case involved a finance company that outsourced some of its software programming and began encountering price and service problems with the company performing the work. When it sought to change suppliers, it discovered that it was highly dependent on the existing one. Specifically, “[o]ver time, the organization had lost its internal knowledge to understand the program code, and even the knowledge to develop a clear statement of work to effectively re-bid the item.” This meant that the firm found it difficult to identify other suppliers that could provide the same service, thus incurring the risk of locking itself into a relationship in which the supplier had superior bargaining power.

Another risk in this situation is that a supplier may make changes to processes and technologies without adequately informing the firm. This

138. See Matusik & Hill, supra note 130, at 692.
139. Ellram et al., supra note 60, at 160.
140. Id. at 161.
141. Id. at 153.
142. Id.
widens the knowledge gap between the firm and the supplier, which makes it difficult for the firm to exercise effective control over the activity. More serious is the risk that, because of its expertise, a supplier gradually may take on additional responsibilities that begin to implicate core strategic activities of the firm without adequate oversight. This can result in the supplier and the firm working at cross purposes, compromising the mission of the firm.

Another study found that a bank that had increased its use of contractors to provide information technology services failed to be attentive to the risk of using such workers on tasks that required a high amount of firm-specific skills. Most of this work involved modifying existing software applications. These applications had been written and rewritten over the course of several years and generally were very poorly documented. The systems were sufficiently complex that “knowledge of how to work with a given application could only be acquired over time, through experience with maintaining and modifying it. Furthermore, there was a wide enough variety of different applications that only a few individuals might have experience in any given application.” The workers therefore specialized in a particular application or set of applications, and built up expertise on the specific proprietary systems that they managed. As a result, “[w]hen those contractors left, other workers would struggle to work with those applications,” which made the company reluctant to terminate them.

The bank’s experience illustrates that a firm that engages in outsourcing in order to gain flexibility in staffing can negate that benefit if it delegates to outside workers tasks that require the development of substantial firm-specific knowledge. Ignoring this consideration can effectively lock the firm into contractual relationships that limit its ability to adjust the size of its workforce based on changing business conditions. The implication of this is that “knowledge can be a more powerful determinant of long term employment than the formal governance arrangements within which that relationship takes place.”

Concern about the transfer of knowledge outside the organization has been one of the major reasons that conventional theory maintains that firms should outsource only tasks that are not integrally related to their core competitive activities. Other reasons include concern about the potential negative impact on regular employees of using contingent workers and, because of historical precedent, the perception that outsourcing is more legitimate for some activities, such as administrative and clerical work, than for others. Arne L. Kalleberg & Peter V. Marsden, Externalizing Organizational Activities: Where and How US Establishments Use Employment Intermediaries, 3 SOCIO- ECON. REV. 389, 392 (2005).

144. Id. at 17.
145. Id. at 23.
146. Id. at 25.
147. Other reasons include concern about the potential negative impact on regular employees of using contingent workers and, because of historical precedent, the perception that outsourcing is more legitimate for some activities, such as administrative and clerical work, than for others. Arne L. Kalleberg & Peter V. Marsden, Externalizing Organizational Activities: Where and How US Establishments Use Employment Intermediaries, 3 SOCIO- ECON. REV. 389, 392 (2005).
their core activity areas by investing in the training and development of employees who are strategically important to the organization" and should use external sources for more peripheral functions.

Research suggests, however, that some firms are beginning to outsource important activities that are related to core functions. These firms tend to operate in dynamic environments characterized by innovation that produces rapid changes in knowledge. Those environments are characterized by "rapid technological change, short product cycles, and 'creative destruction.'" In such cases, remaining competitive requires that a firm continually upgrade its stock of knowledge and avoid allowing practices and processes to become rigid. In these settings, establishing relationships with a network of outside suppliers who work on core functions can serve to expose a firm to innovative knowledge that is vital to the firm's continued competitiveness.

This trend indicates that outsourcing can be prompted by a firm's desire to acquire knowledge, not simply by the goals of reducing costs and increasing flexibility in the use of workers. Matusik and Hill argue that decisions on when and how to use contingent workers should depend on (1) the intensity of pressures for cost containment and a flexible workforce and (2) how stable or dynamic the firm's competitive environment is—that is, how rapidly knowledge becomes obsolete. The more quickly knowledge becomes obsolete, the less concern the firm should have about the risk that outsourcing will result in disclosure of knowledge outside the firm. Their suggestions are worth summarizing at some length:

Firms based in stable environments characterized by low competitive pressures [should] value preserving knowledge over knowledge creation and, thus, should make low use of contingent work. Those based in stable environments characterized by high competitive pressures should make use of contingent work in noncore areas if there is direct cost saving. Firms based in dynamic environments characterized by mild competitive pressures should make use of contingent work in the core value-creation areas of the firm and limit its use elsewhere. Finally, those firms based in dynamic environments characterized by intense competitive pressures

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148. Id. at 394 (citations omitted); see, e.g., Jay Barney, Firm Resources and Sustained Competitive Advantage, 17 J. MGMT. 99, 116–17 (1991); Nesheim et al., supra note 37, at 249–50 (summarizing conventional view); C. K. Prahalad & Gary Hamel, The Core Competence of the Corporation, 90 HARV. BUS. REV. 79 (1990); see also Matusik & Hill, supra note 130, at 690 ("In much of the existing literature, scholars recommend a cautious stance toward the use of contingent work, advocating its use only outside of core value-creation areas central to the attainment of competitive advantage.").

149. See, e.g., Matusik & Hill, supra note 130, at 695; Torstein Nesheim, Using External Work Arrangements in Core Value-Creation Areas, 21 EUR. MGMT. J. 528, 530 (2003).

150. Nesheim et al., supra note 37, at 250.

should make relatively extensive use of contingent work in both core and noncore areas.\textsuperscript{152}

Knowledge transfer thus is a significant dimension of outsourcing. At a minimum, firms need to be aware of the risk that suppliers may be a conduit for transmitting valuable private knowledge outside the firm. In addition, they need to appreciate that any outsourcing arrangement contains the potential for the firm to acquire new knowledge from outside parties, which an organization may be able to integrate into its operations. Finally, firms in dynamic industries in which knowledge rapidly becomes obsolete may actively seek relationships with outside suppliers that provide them with access to innovation and emerging best practices.

2. Law Firms

An analysis of the implications for law firms of the research on knowledge transfer reveals that the field rarely focuses on the creation and dissemination of knowledge when assessing legal services. In particular, firms themselves may not sufficiently appreciate the importance of conceptualizing their competitive assets in this way. Applying this analytical framework to law firms therefore may be useful at this point mainly as an impetus to begin thinking more systematically about the forms of knowledge that firms possess and the concept of innovation in legal services.

The first question is what stock of private knowledge a firm may have. With respect to explicit knowledge, sources of law such as statutes, regulations, judicial opinions, and the like are publicly available. Firms may vary, however, in the systems they develop for keeping people informed of new developments, as well as for organizing, retrieving, searching, and analyzing information about legal sources. They may compile special legal databases for particular practice groups and arrange for regular briefings for lawyers and other people in the group. Firms also may use distinctive ways of staffing and dividing work among members of teams involved in litigation, transactions, legislative work, regulatory advice and compliance, and other types of matters. They may develop explicit knowledge in the form of due diligence checklists, standard forms that can be modified for particular matters, document review processes, conflicts checking systems, client intake procedures, and standard terms in engagement letters. They also may create specific procedures for providing feedback and evaluating performance at the end of a representation.

Firms also possess tacit knowledge in various forms. People have insight into matters such as how to approach negotiations with various parties, how to navigate a matter through a regulatory agency, when to use which documents in connection with what types of cases or deals, what types of arguments are likely to be most effective before which tribunals, the formal

\textsuperscript{152} Matusik & Hill, \textit{supra} note 130, at 691.
and informal networks of influence inside client organizations, how clients store and use information, the skills and expertise of various people within the firm and in other firms, and the economics and competitive landscape of industries in which clients operate.

These are but a few of the forms of knowledge that law firms possess that contribute to organizational effectiveness. As firms participate more extensively in outsourcing, their personnel also may have access to the knowledge of suppliers and other partners that comprise a firm’s supply chain. A firm thus will come to possess knowledge beyond what is contained within its formal boundaries. This can make it difficult for anyone in the firm to have enough information about the firm’s knowledge stock to determine the risks of and opportunities for knowledge transfer in relationships with outside agents.

This difficulty reflects the phenomenon of “distributed knowledge.” As organizations such as firms become larger and more complex, the knowledge they possess becomes more “distributed.” Distributed knowledge is knowledge “that is not possessed by any single mind, but ‘belongs to’ a group of interacting agents, somehow emerges from the aggregation of the (possibly tacit) knowledge elements of the individual agents, and can be mobilized for productive purposes.” 153 A set of agents thus knows something that no single agent completely knows. As a firm comes increasingly to rely on knowledge specialists, whether employees or outsiders, it can be conceptualized as a “distributed knowledge system.” 154 Researchers suggest that this dynamic has accelerated in recent years as firms acquire knowledge from an expanding number of disciplines, which themselves are becoming more complex in terms of depth and specialization. 155

Awareness of the increasingly distributed character of knowledge has prompted efforts in recent years to implement knowledge management programs in law firms. These programs aim to identify, capture, and distribute knowledge that firms possess so that it can be put to productive use. 156 They enable lawyers in the firm to work more efficiently by drawing on the accumulated wisdom and products of others who have been involved in similar projects. They can help a firm respond more quickly to client requests, and to market its systems and processes to clients as a

153. Kirsten Foss & Nicholai J. Foss, Authority in the Context of Distributed Knowledge 1 (Danish Unit for Indus. Dynamics, Working Paper No. 03-08, 2002), available at http://www3.druid.dk/wp/20030008.pdf. Foss and Foss emphasize “that this does not amount to asserting the existence of mysterious supra-individual ‘collective minds.’ Knowledge still ultimately resides in the heads of individuals; however, when this knowledge is combined and ‘aggregated’ in certain ways, it means that considered as a system, a set of agents possesses knowledge that they do not possess if separated.” Id. at 5.


155. See Granstrand et al., supra note 109, at 8.

competitive advantage of the firm. Firms also can draw on distributed knowledge to develop innovative products for clients, such as online advisory services or document assembly programs.

Many programs that have been established, however, focus on capturing explicit knowledge, with an emphasis on legal knowledge, rather than tapping into tacit knowledge on a broad range of subjects. A crucial function of knowledge management, however, is converting tacit knowledge into explicit knowledge. Accomplishing this task may require, for instance, performing an inventory of the matters on which people in the firm have worked and the expertise that they have required, and then creating a database that lists which people have what experience. This should be continually updated as members of the firm work on new matters and acquire new expertise. Some of this knowledge can be expressed in explicit terms, while tacit knowledge can be transmitted informally if people are aware of whom to contact for insights on what issues. This system can enhance the ability of the firm to draw on the knowledge distributed among its members.

Despite the advantages of more systematic knowledge management programs, firms have tended to face some obstacles in implementing them. Firms often have discrete rather than integrated financial, document, and client management systems; reliance on hourly billing can limit incentives for initiatives that can result in work being done more quickly; partner compensation models that focus on individual revenue generation can limit willingness to share work and expertise; members of practice groups may have limited opportunities to interact with lawyers in other groups; and lawyers may be concerned that their human capital will become less rare and less valuable if they share knowledge widely with others. Law firms will need to overcome these impediments in order to make intelligent decisions about the knowledge transfer risks and opportunities they will confront in working with outside suppliers.

Law firms that want to enhance their ability to acquire and integrate knowledge from outside workers also may need to deal with employee perceptions that such workers have little to teach the firm. Status hierarchy is a prominent feature of the legal profession, and contingent workers typically are accorded low status by lawyers and permanent employees within law firms. This may lead firm members to overlook the knowledge that contingent workers can offer on subjects such as how to organize and review information more efficiently and how to deliver services in innovative ways.

Assuming that firms have adequate knowledge management systems in place and are receptive to the possibility of learning from outside workers, what type of outsourcing strategy is likely to be attractive to them from the standpoint of knowledge transfer? The main motives for outsourcing to

157. Id. at 71.
158. Id. at 119–34.
date have been the desire to reduce costs and to adjust the workforce in response to fluctuating demand. In terms of Matusik and Hill’s matrix, firms are moving toward the intense end of the spectrum with respect to cost and flexibility pressures. This suggests that they have placed a “high value on knowledge preservation,” “low value on knowledge creation,” “low value on public knowledge accumulation,” and “high value on direct cost saving.” As a result, firms have used outside workers mostly for support functions, such as handling discovery of electronic information in litigation, reviewing documents for relevance and privileged status, conducting legal research on discrete legal issues, and reviewing and modifying standard transaction documents.

The other dimension of Matusik and Hill’s matrix is how dynamic a firm’s environment is with respect to innovation and the rate at which knowledge becomes obsolete. Law firms’ tendency to use outsourcing for support functions suggests that they either believe they operate in an environment characterized by low dynamism or that they simply have not focused on this dimension. In either case, the increasing sophistication of clients and the growing complexity of transactions and disputes suggest that firms may gain a competitive advantage by focusing more explicitly on possibilities to use outsourcing to acquire new knowledge that can lead to innovation in the services they provide. Law firms, however, generally have not placed a priority on innovation in the way that companies in many other sectors have done. They do not, for instance, have research and development programs, nor do they typically enter into the kind of joint ventures that are common among high technology firms.

There may be several reasons for this trend. First, many modern firms may not be confident that they will be representing a sufficiently large group of similar clients to make investment in innovation worthwhile. Firms have a greater incentive to invest in research and development as it becomes more likely that they will be able to spread its cost over a large number of clients and capture the benefits of innovation. One of the most notable instances of law firm innovation, for instance, was Wachtell Lipton’s creation of the poison pill takeover defense in the 1980s. While the firm developed the first version of a pill in the course of a takeover fight, it continued to revise it independent of the needs of any particular client. In this respect, Wachtell “was developing and refining the new legal device much as a manufacturing company might modify a new product after an initial market test.” The firm could do this because it

159. Matusik & Hill, supra note 130, at 690 tbl.1.
163. See id. at 436–37.
164. Id. at 437.
was confident that it would be representing a large number of clients who needed help fending off hostile tender offers. Similarly, Stephen Choi and G. Mitu Gulati maintain that Cleary Gottlieb's representation of the largest number of issuers in sovereign bond offerings is an important reason for the firm's willingness to initiate significant shifts in the standard terms of such bonds. "Attorneys handling smaller numbers of offerings," they suggest, "may simply lack the economies of scale to absorb the fixed costs of generating a new term, researching the impact of the term, and bearing the risk if the term turns out poorly for the clients."  

Many firms today, however, have no assurance that representing a client in a particular matter means that they will do so in similar matters in the future. Even firms that participate in preferred provider networks are guaranteed a certain amount of work only for a limited period of two or three years. This uncertainty may decline if sole source arrangements such as those between Tyco and Eversheds and between Levi Strauss and Orrick become more common, but it is too early to say whether such arrangements will spread or whether they will encourage law firm investment in innovation.

Second, law firms enjoy no intellectual property protection for any innovations they develop. A firm that designs a creative deal structure, for instance, will lose control over that innovation the moment it distributes documents to the parties—and their lawyers—involves in the transaction. As soon as Wachtell Lipton developed the poison pill, "several additional varieties of the [pill] soon appeared in the marketplace, each hawked by different law firms extolling the virtues of their particular model." This inability to capture the lion's share of rewards from innovation may discourage law firms from incurring the cost of developing novel arrangements.

Third, law firm financial structure may discourage investment in innovation. Firms distribute their profits to partners at the end of each year. Many do not hold back the equivalent of retained earnings for investment in the firm, in part because of fear that profitable partners will leave for more lucrative options at other firms. In addition, more attenuated ties between partners and firms means that partners may not have the long-term perspective that would support investments that might pay off only with

166. On the possible movement toward more durable ongoing relationships between corporate clients and selected law firms, see Wilkins, supra note 126.
168. Powell, supra note 162, at 441 (footnote omitted).
some delay or not at all.\textsuperscript{169} Partners bear all the risk of such investment, since firms are prohibited from having outside investors with diversified portfolios who might be willing to take the risk that research and development efforts might not yield a return. In addition, specialists who serve as the engine of innovation comprise only one practice group in large firms and must compete for resources with other groups. By contrast, Wachtell Lipton was a firm that specialized in takeover defense when it developed the poison pill and was able to maintain its competitive advantage because it remained a small firm with a focused practice. A large percentage of lawyers in the firm thus likely saw themselves as the beneficiaries of continuing efforts to refine the pill.

Finally, law firms face obstacles to participating in networks that may be especially likely to prompt innovation. Ronald Burt suggests that there is particular value in networks in which a party has relationships with diverse partners who otherwise have no connection to one another.\textsuperscript{170} Participation in networks with such "structural holes" exposes an actor more quickly to a broader range of information and a diversity of perspectives. This may enable a participant to make the connections among disparate conceptual schemes that result in innovation. Despite this potential benefit, high-status firms may be wary that developing ties with a wide range of partners across status boundaries will dilute their own status.\textsuperscript{171} In addition, bar rules prohibit lawyers from practicing in multidisciplinary organizations, in which lawyers might be exposed to diverse perspectives, and in firms in which nonlawyers have management or ownership interests.\textsuperscript{172}

Despite these potential limitations, the concept of innovation in legal services has begun to receive more sustained attention in recent years. The Financial Times inaugurated an annual Innovative Lawyers Report in 2006, which has recognized and spurred alternative approaches to providing legal services by European law firms and legal departments.\textsuperscript{173} The College of Law Practice Management sponsors an annual InnovAction Award,\textsuperscript{174} and the American Bar Association has published a booklet on Innovations in the Delivery of Legal Services.\textsuperscript{175} More broadly, the topic of innovation has


\textsuperscript{171} PODOLNY, supra note 93, at 231.


\textsuperscript{175} STANDING COMM. ON THE DELIVERY OF LEGAL SERVS., ABA, INNOVATIONS IN THE DELIVERY OF LEGAL SERVICES: ALTERNATIVE AND EMERGING MODELS FOR THE PRACTICING
become a more prominent focus in the legal press\textsuperscript{176} and the legal academy.\textsuperscript{177} None of this ensures that innovation will occur, of course, but increasing attention to what the concept means in legal services enhances the likelihood that at least some firms will rethink the way they do business.

It is difficult to say how intensely innovative an environment in legal services might emerge, but to the extent that it does, firms will place a higher value on knowledge creation and the accumulation of public knowledge.\textsuperscript{178} Greater research on and attention to the concept of innovation could increase firms' interest in using outside workers as a vehicle for acquiring new advanced knowledge that can be used in the performance of core functions. At a minimum, it would help clarify the ways in which knowledge is created, sustained, and rendered obsolete in the legal services industry.

D. Use of Contingent Workers

1. Introduction

As outsourcing increases in response to pressures to decompose tasks and assign them to the most cost-efficient providers, firms use a larger number of contingent workers who are not permanent employees to perform a variety of functions. This practice can produce benefits by increasing the flexibility of firms in adjusting personnel costs to changes in demand. Firms need to be aware, however, that the use of contingent workers can produce significant changes throughout an organization:

Outsourcing changes the nature of tasks, the design of jobs, and the design of subunits and interunit relationships, thus changing the experience of employment, including the tasks that individuals perform, whom individuals interact with when performing their work and the nature and frequency of that interaction, and the compensation individuals receive for their work.\textsuperscript{179}

Alison Davis-Blake and Joseph Broschak provide a comprehensive review of research on the impact of outsourcing on permanent employees,


\textsuperscript{177} See, e.g., Hadfield, supra note 172. For a fascinating discussion of the possibilities for collaborative work on developing contract innovations, see George Triantis, Collaborative Contract Collaboration (Nov. 10, 2009) (unpublished article, on file with authors) (discussing The Harvard Law School Contracts Wiki, http://ackwiki.com/drupal/ (last visited Feb. 28, 2010)).

\textsuperscript{178} See Matusik & Hill, supra note 130, at 690.

\textsuperscript{179} Alison Davis-Blake & Joseph P. Broschak, Outsourcing and the Changing Nature of Work, 35 ANN. REV. SOC. 321, 322 (2009).
work group dynamics, job design, and organizational structure and culture. They divide outsourcing into three major types. The first occurs when a firm outsources entire business functions or processes. Thus, for instance, biotechnology companies involved in research may outsource functions such as pharmaceutical manufacturing or marketing and distribution to firms with skills and expertise in those specialties. A second type of outsourcing involves locating portions of business processes, or components of complex products or services, outside the boundaries of the firm. Within the human resource function, for instance, a company may outsource the administration of benefits or payroll services while retaining other functions inside the firm. Finally, firms may outsource the staffing function, obtaining workers through intermediaries such as temporary employment agencies, professional employer organizations, and executive search firms. In these cases, the firm typically supervises and directs the work of individuals who are provided by intermediaries.

2. Employee Tasks and Skills

One body of work to which Davis-Blake and Broschak direct attention is research on the impact of outsourcing on permanent employee tasks and skills. This body of work suggests that the impact depends on the types of functions that a firm outsources and its reasons for doing so. Firms may seek to outsource support functions while retaining core functions, or may assign simpler tasks to contractors in order to reduce the organization’s dependency on them. In these cases, permanent employees can be freed from routine tasks and have greater opportunities to focus on more complex and challenging work. In other cases, firms may outsource for specialized skills and expertise that are too expensive, used too infrequently, or change too rapidly to justify investment in internal capabilities. This decision may relegate permanent employees to performance of relatively routine tasks.

Outsourcing also may create the need for employees to perform new tasks and learn new skills. Firms that engage in process outsourcing need to develop structures to integrate the work of parties whom they do not directly supervise. As the earlier discussion of process integration indicates, employees must develop skills in project management. One study of engineering outsourcing, for instance, identified five capabilities

180. Id. at 324–25.
181. Id.
that firm engineers need beyond technical skills: (1) writing and managing
contracts and budgets, (2) communication skills for coordinating and
cultivating relationships with outsource partners, (3) the ability to motivate
and engage in change management with outsource partners, (4) skills for
team-building and delegating responsibilities, and (5) problem-solving
skills for analyzing options and planning for contingencies.184 The firms in
which these engineers worked, however, did little to provide formal training
in these skills. This research suggests that some firms still fail to appreciate
that movement of tasks outside the firm to multiple providers requires
taking steps to integrate activities all along the supply chain.

Outsourcing that takes the form of staffing through intermediaries also
may create new tasks for firm employees, although these may be less
complex and more burdensome than those required by process outsourcing.
When firms use temporary workers, employees often are required to
supervise and correct their work.185 “[I]n many lead firms,” Davis-Blake
and Broschak report, “the responsibility for orientation, training, and
socialization of outsourced workers regularly falls on the shoulders of the
lead firm’s employees, who do not receive any additional compensation for
these efforts.”186 This can make it hard for employees to do their own jobs
adequately, especially when turnover of temporary workers is high.

3. Work Group Dynamics

Firms also need to be aware that outsourcing can produce changes in the
composition of work groups and in group processes that have the potential
to affect relationships among workers. Most research has focused on the
use of a “blended workforce,”187 which involves temporary or contract
workers brought into firms to work with permanent employees. Research
on the impact of outsourcing on permanent employee attitudes has focused
thus far only on staffing through intermediaries. This scholarship suggests
that firms need to be aware of certain challenges that this form of
outsourcing can pose. One study of an electronics manufacturing plant, for
instance, found that the use of temporary workers reduced perceived job
security and fostered resentment among permanent employees at having to

184. ALISON DAVIS-BLAKE, KEVIN E. DICKSON, JOSEPH P. BROSCHAK, G. EDWARD
GIBSON, JR., FERNANDO J. RODRIGUEZ & TODD A. GRAHAM, OWNER/CONTRACTOR
ORGANIZATIONAL CHANGES: PHASE II REPORT 31–33 (1999) [hereinafter
OWNER/CONTRACTOR PHASE II REPORT].
185. See John Francis Geary, Employment Flexibility and Human Resource Management:
The Case of Three American Electronics Plants, 6 WORK EMP. & SOC’Y 251, 262–64 (1992);
Vicki Smith, Institutionalizing Flexibility in a Service Firm: Multiple Contingencies and
186. Davis-Blake & Broschak, supra note 179, at 328.
187. Susan J. Ashford, Elizabeth George & Ruth Blatt, Old Assumptions, New Work: The
Opportunities and Challenges of Research on Nonstandard Employment, 2 ACAD. MGMT.
ANNALS 65 (2007); Alison Davis-Blake, Joseph P. Broschak & Elizabeth George, Happy
Together? How Using Nonstandard Workers Affects Exit, Voice, and Loyalty Among
work with their temporary colleagues. Another study of aerospace engineers found that the presence of contract engineers lowered employee trust in the organization. Still other research has found that the use of temporary workers lowered permanent employees' commitment to the organization, reduced their trust in it, and increased perceptions of a violation of the psychological contract; that it lowered trust toward peers, organization-based self-esteem, and altruism; and that it increased employee turnover.

Blake-Davis and Broschak note that there is no consensus on why staff outsourcing may lead to negative permanent employee attitudes in some cases. One possible explanation is that the use of temporary workers puts subtle pressure on permanent employees to work harder and longer than usual because temporary workers do not work overtime and generally are not flexible in their assignments. Another is that the use of outsourced labor serves as a subtle reminder to employees of their potentially uncertain job status; still another is that employees resent the uncompensated responsibilities for training and supervising temporary workers that they need to assume.

Research suggests that the effect of outsourcing on permanent employee attitudes may differ according to the status of the outside worker, the position of the employee, and the nature of the interaction between outside and permanent workers. One early study found that the use of temporary production workers to work alongside permanent employees in an electronics manufacturing plant created tension and impaired group performance because employees resented the fact that they had to take time away from their own jobs to train and supervise temporary workers. Another study of a business services firm concluded that temporary workers heightened work group conflict for the same reason and because hierarchies tend to develop when individuals work together under different arrangements. Consistent with the latter finding, Davis-Blake and Broschak suggest that the negative effects of outsourcing increase with the proportion of temporary workers in work groups because temporary

188. Geary, supra note 185, at 260–61.
192. Davis-Blake et al., supra note 187, at 330.
193. Davis-Blake & Broschak, supra note 179, at 330.
194. See Geary, supra note 185, at 260–61; Smith, supra note 185, at 300.
195. See Davis-Blake & Broschak, supra note 179, at 330; Geary, supra note 185, at 259.
196. See Davis-Blake et al., supra note 187, at 478.
197. See Geary, supra note 185, at 259–60.
198. See Smith, supra note 185, at 300–01.
workers tend to have lower social status in such groups than do employees, a difference that is reinforced by employers' efforts to identify and treat the two sets of employees differently in order to avoid coemployment claims.199

The effect of blending outside workers and employees may differ depending on the characteristics of each. Davis-Blake, Broschak, and Elizabeth George, for instance, distinguish between contract workers, who sign agreements with organizations to furnish services for a specific length of time, and temporary workers, who are hired for indefinite, typically shorter, periods of time.200 Contractors are more likely to work independently or to receive some supervision from an intermediary staffing organization. The study indicates that using temporary workers in blended work groups has a greater negative effect on group dynamics than using contract workers, and that this effect increases with the proportion of temporary workers. They suggest that contract workers pose less of a threat to the job security of permanent employees because they typically are used to provide new knowledge that is complementary to, rather than a substitute for, the knowledge of employees.201 Contract workers also generally require less supervision from permanent employees than do temporary workers.

Research also suggests that workers in lower-wage positions are more strongly affected by the use of blended work groups because they are most similar to, and most threatened by, the use of temporary workers.202 Employees with formal responsibility for training coworkers are less affected than other employees, perhaps because they are not asked informally to take on additional duties without compensation.203

The tension that can result from blending temporary and permanent employees can prompt closer management supervision in an effort to integrate the two types of workers. This in turn may increase mistrust of and resentment toward supervisors of permanent employees.204 Other research finds that employees who work with either temporary or contract workers report poorer relationships with supervisors,205 and that the relationships worsen with higher proportions of temporary workers.206 Two scholars suggest that permanent employees hold their supervisors

200. See Davis-Blake et al., supra note 187, at 476.
201. See id. at 477.
202. See Broschak & Davis-Blake, supra note 199, at 389; Davis-Blake et al., supra note 187, at 478.
203. See Davis-Blake et al., supra note 187, at 476.
204. See Geary, supra note 185, at 259.
205. See Davis-Blake et al., supra note 187, at 476.
206. See Broschak & Davis-Blake, supra note 199, at 389.
responsible for fairly allocating work in blended groups and thus may blame them for perceived inequities in such groups.\textsuperscript{207}

In sum, the use of contingent workers, particularly through staffing outsourcing, can both increase organizational flexibility and pose challenges in the workplace. On one hand, "[s]taffing outsourcing allows many lead firm managers to delegate training, evaluating, or monitoring of temporary workers to peers and to delegate responsibility for hiring, managing, and disciplining temporary workers" to outside intermediaries.\textsuperscript{208} On the other hand, if firms are not careful, this practice has the potential to undermine both the effectiveness of work teams and the relationships between supervisors and subordinates. Firms that plan to use contingent workers need to consider the potential for such outcomes and how to avoid them in order to derive meaningful benefits from outsourcing.

4. Organizational Design

Outsourcing requires that knowledge and information flow across the organizational boundaries between a lead firm and its outside providers. As two scholars observe,

[T]he problem of information flow across boundaries is not simply one of determining how to transfer a particular volume and type of information. Differences between lead firms and suppliers in culture, norms, and even the language in which business is normally conducted can easily lead to misperceptions and miscommunications about assumptions, standard operating procedures, and even the definition of terms used by the other party.\textsuperscript{209}

Responding to this challenge may require changes in both organizational structure and culture. The nature of these changes will depend upon the complexity of the work that is outsourced, its volume, whether it is a core or peripheral function of the firm, whether entire or partial processes are outsourced, and whether design as well as execution of the activity is delegated to an outside provider.\textsuperscript{210}

Three researchers have suggested that firms can respond to the need to enhance information flow across organizational boundaries in three basic ways.\textsuperscript{211} First, they can use formal governance mechanisms to specify in some detail the interaction between firms. One way to do this is by entering into alliances governed by relational contracts with certain suppliers. These alliances represent legal relationships around which firms can create organizational structures. Such relationships are relatively stable; they

\textsuperscript{207} See \textit{id.}.

\textsuperscript{208} Davis-Blake & Broschak, \textit{supra} note 179, at 331–32.

\textsuperscript{209} Id. at 333.

\textsuperscript{210} See \textit{id.} at 332–35.

\textsuperscript{211} Id. at 332–33. \textit{See generally} Edward G. Anderson, Jr., Alison Davis-Blake & Geoffrey G. Parker, Managing Outsourced Product Design: The Effectiveness of Alternative Integration Mechanisms (Oct. 24, 2008) (unpublished manuscript, on file with authors).
reduce the number of suppliers and allow a firm to focus on communications with them.\textsuperscript{212} A variation on this is to divide suppliers into different tiers and focus interactions on one tier, relying on suppliers in this tier to manage the activities of providers in other tiers.\textsuperscript{213}

If the costs of establishing and maintaining alliances or supplier tiers are too high, a firm may attempt to maximize information flow by relying on less formal mechanisms. One is colocation—assigning personnel from one organization to work in another. Another is using “boundary spanners” whose main responsibility is to enhance the exchange of information between a lead firm and its suppliers.\textsuperscript{214} These measures can create personal relationships that foster trust, align expectations, and enable the transmission of tacit or sensitive information.\textsuperscript{215}

Outsourcing may have an impact not only on organizational structure but also on organizational culture. As Davis-Blake and Broschak observe, “because outsourcing changes which individuals interact regularly with each other, the frequency of those interactions, and the issues about which they interact, outsourcing has the potential to materially change organizational culture.”\textsuperscript{216} Research on this subject currently is relatively limited. One body of scholarship indicates that contract and temporary workers are less likely than employees to identify with and be committed to the lead firm.\textsuperscript{217} One study, however, focused on the extent to which contract workers identify with both the lead firm and the intermediary.\textsuperscript{218} It found that identification with the lead firm can be strengthened by social ties between contract and permanent employees, while identification with the intermediary tended to be a function of that organization’s distinctiveness in the marketplace.\textsuperscript{219} Since individuals will shape and disseminate an organization’s culture the more they identify with it, promoting strong social ties between contract and permanent employees may help develop a common culture. Exactly what the elements of that common culture are likely to be, however, and the extent to which it

\textsuperscript{216} Davis-Blake & Broschak, supra note 179, at 334.
\textsuperscript{218} See generally Elizabeth George & Prithviraj Chattopadhyay, One Foot in Each Camp: The Dual Identification of Contract Workers, 50 ADMIN. SCI. Q. 68 (2005).
\textsuperscript{219} Id. at 93–95.
reinforces or undermines the lead firm's objectives, remain a subject for future research.

Research on outsourcing the human resources function also may have implications for organizational culture. Lead firms and staffing intermediaries in many cases are moving away from spot market transactions toward more complex interdependent relationships in which the intermediary attempts to learn the nuances of the lead firm's culture and provide it with employees that are a good fit. Intermediaries whose personnel work on the lead firm's site may be especially likely to "become involved with complex, often unstated negotiations with lead firm managers about what the culture of the lead firm should be and about the attributes required to fit in the culture of the lead firm." Davis-Blake and Broschak conclude that future research should attempt to clarify the impacts of outsourcing on organizational structure and culture. They suggest that one potentially significant issue is whether firms that begin to rely on outsourcing continue to do so or vacillate between outsourcing and internal production in order to avoid some of the negative impacts of relying on outside providers. For firms that follow the first path, outsourcing may result in relatively permanent changes in organizational features. For firms that pursue the second path, effects on structure and culture may be more ephemeral.

5. Law Firms

Assessing the potential impact of outsourcing on work relationships involving law firm projects requires first considering what type of arrangements law firms tend to use. Do most firms outsource entire processes, partial processes, or the staffing function to obtain temporary employees? We need much better data to answer this question with any confidence, but we can suggest at least the broad outlines of what law firms seem to do. Some firms use outside vendors to manage functions such as litigation discovery or patent filing, which arguably constitutes locating entire processes outside the firm. The boundary between entire and partial processes is not airtight. Discovery, for instance, obviously is part of the larger litigation function, and it needs to be integrated with other activities. Nonetheless, it is a relatively discrete aspect of a case that can be segregated to some extent. Firms also assign portions of larger tasks to legal process outsourcers, such as the document review function of discovery, legal research to inform the provision of a variety of legal services, and the due diligence portion of transactional or regulatory work. In these instances of entire or partial process outsourcing, much of the work seems to be done off site and tends to be supervised most directly by the contractor.

220. See, e.g., VICKI SMITH & ESTHER B. NEUWIRTH, THE GOOD TEMP (2008); Davis-Blake & Broschak, supra note 179.
221. Davis-Blake & Broschak, supra note 179, at 335.
222. See id. at 336.
While some firms do engage in outsourcing of entire or partial processes, a large percentage of firms appear to use contract lawyers hired through staffing intermediaries. These lawyers are on temporary assignment, but may work as long as two or three years on a specific matter, particularly in litigation. They tend to be supervised mostly by people within the firm, rather than by outside parties. A good number probably do work, such as document review, that at least some other firms delegate to legal process outsourcing companies. Firms may prefer to use contract lawyers for such tasks because of concern about the quality of LPO work, the desire to staff sensitive matters so as to ensure supervision by members of the firm, or simply because a firm has not evaluated the extent to which portions of its work could be outsourced to LPOs.

Whatever the form that outsourcing takes, law firms appear overwhelmingly to use it for what are regarded as routine support functions. This tendency may free up lawyers within the firm to do more complex, sophisticated work. Contract lawyers or LPO employees, for instance, may conduct large-scale document review that a few years ago was performed by associates. Thus, while there may be fewer associate positions in law firms if outsourcing continues to gain momentum, those that remain may be offered more challenging work.

Davis-Blake and Broschak's review of research suggests that members of law firms that engage in process outsourcing will need to develop skills to coordinate the work of companies whose work the firm does not supervise on a daily basis. They will need, for instance, good communications skills, along with the ability to motivate workers from different organizations, negotiate and administer service contracts, assemble effective teams, and plan for and respond to contingencies. Davis-Blake and Broschak found in one study that engineering firms generally did not provide much training in such skills, and it is unlikely that law firms currently do either. Members of firms for the most part probably are building these capabilities through trial and error, but an increase in the use of process outsourcing will require that law firms provide more systematic training in these functions.

In contrast to employees of process outsourcing companies, contract lawyers tend to be directly supervised by law firms. This can create extra burdens for law firm lawyers—often associates—who are responsible for training, monitoring, and correcting the work of these temporary workers. The need to oversee this routine work may reduce the time that lawyers are able to devote to the more complex work that outsourcing theoretically frees them up to perform. This may create some resentment of both contract lawyers and the firm, especially if lawyers are not given credit for assuming this supervisory responsibility. It is less clear whether the use of contract lawyers is likely to generate negative attitudes because it heightens lawyers' sense of job insecurity. Contract lawyers may serve as a reminder that some portion of the work done in law firms does not require complex

223. OWNER/CONTRACTOR PHASE II REPORT, supra note 184, at 32.
analytical skills and that the percentage of such work may increase as even sophisticated tasks are broken down into simpler discrete components that involve following standard routines that require minimal discretion. This reminder may be especially salient for associates.

Given the relatively small number of parties in the current law firm supply chain, firms may not need to devise substantially different structures to ensure adequate information flow between themselves and outside suppliers. To the extent that the size of the chain and number of participants increases, they may begin to follow their clients' practice of assembling preferred provider networks. This would not only enhance the flow of information but also could help address the risk of a more fragmented workforce comprised of people inside and outside the firm with affiliations to different organizations. Law firms already face major challenges in sustaining integrated cultures for a variety of reasons, and greater reliance on a network of outside suppliers could exacerbate them.

More detailed empirical research on law firm use of contingent workers would help in analyzing the issues that scholarship on other organizations suggests arises with this type of employment relationship. It would be helpful to know more about when law firms use contingent workers, for what kinds of tasks, who supervises them, and how using them affects the work that lawyers in the firm do.

**CONCLUSION**

The Rio Tinto contract with CPA Global suggests that law firms are likely to face increasing pressure to disaggregate their services and engage in at least some outsourcing to compete effectively in the legal services market. Disaggregation will require greater attention to how work can be decomposed, with the goal of selecting the optimal mix of personnel and technology to provide service on various matters. This process may result in an increase in the types of positions available for permanent salaried lawyers in law firms who have specialized skills in discrete functions or areas of law. It also may increase the use of workers outside the boundaries of the firm. Much of the work that firms assign to both groups is likely to be relatively routine or at least limited in scope.

As a result, the number of associate positions available in law firms each year may decline from previous years as outside workers take on these tasks. At the same time, the responsibilities that this smaller group of associates assumes may be more challenging than they traditionally have been. This raises two questions. First, to what extent does complex legal work require familiarity with more routine tasks such as reviewing documents for relevance or privilege, summarizing depositions, or conducting searches on research databases? If sophisticated work requires experience with routine tasks, how will associates acquire such experience if clients will pay only for contract lawyers or LPOs to do routine work?

Second, will firms acknowledge that acquiring complex skills will require some period of time in which associates generate only minimal
revenues while they are being trained? This may mean that the type of apprenticeship programs that some firms recently have announced may become more common. Those programs will require a substantial commitment by the firm to training and development and by its partners to devote time to mentoring. Will such commitment be forthcoming? If firms begin to hire smaller entering associate classes, it may be advisable to spend more time screening candidates and investing in those who are selected, rather than using only superficial hiring criteria and relying on competition among lawyers who join the firm to identify those who have a future with it. Will firms be willing to do this?

What legal career paths will be available in this emerging world? It may be that a smaller number of law school graduates realistically will be able to aspire to tenure-track associate positions that pay anything like the salaries that beginning lawyers have enjoyed in recent years. Other graduates, however, could have opportunities to join firms as permanent lawyers at a comfortable but not exceptionally high salary, focusing on work that is somewhat specialized and narrower than work available to tenure-track associates. More modest average salaries may put pressure on law schools to limit tuition increases, since the financial return on a law school education may be smaller for many graduates than it has been in recent years. Schools also will need to think carefully about what kinds of legal and nonlegal capabilities their graduates will need if career opportunities change in this way.

On a more general level, the continuing advance of disaggregation would create even more ambiguity about what skills distinguish lawyers from other occupations. Performance of an increasing number of activities in the legal services supply chain by nonlawyers would begin to shrink the territory that lawyers can claim as their own. If lawyers attempt to define that territory as the ability to render sophisticated advice requiring complex judgment about corporate affairs, other professionals are in a position to claim that they possess the same set of skills.

The economic downturn therefore could mark a moment of transition for law firms less because of its immediate financial impact and more because it has highlighted and accelerated the trend toward the disaggregation of legal services that had begun before it. This trend reflects the maturation of the legal services sector into a highly competitive industry driven more forcefully than ever by pressures for efficiency. How law firms, clients, and organizations connected with this industry respond could shape not only the future of law firms, but of the legal profession itself.

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