

Managerial Contracting: A Preliminary Study

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(Preliminary Draft)

Abstract

This essay suggests that, in the modern outsourced economy, important types of contractual relationships—among them those related to industrial procurement—are neither fully transactional nor fully relational. Rather, the agreements that govern these relationships incorporate highly detailed written terms that focus not only on what is promised but also on the details of how it is to be achieved and how the suppliers' actions will be monitored over the life of the agreement. These provisions are not, for the most part, effectively backed by the threat of legal sanctions. Nevertheless they have the potential to add significant value to contracting relationships. Many of these provisions—termed here “managerial provisions”—employ techniques used to organize relationships and increase productivity within firms. Known in the literature as elements of hierarchy, the techniques introduced by managerial provisions are used to provide a roadmap for carrying out the transactors' work-a-day actions and interactions in ways that are likely to facilitate successful contracting relationships. Interestingly, among the many hierarchical governance mechanisms that managerial provisions import into contracting relationships are eighteen elements of hierarchy that have been closely associated with persistent performance differences across similarly situated enterprises. This raises the intriguing possibility that more fully integrating some or all of these (and other) managerial practices into supply agreements may add as yet unrealized value to these (and other types of) contracting relationships.

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I. INTRODUCTION

Over the past four decades a number of technological and other changes have strongly affected American manufacturing – among them: firms outsourcing all but core competencies,¹ shorter product cycle times,² the increased pace of technological change,³ the widespread adoption of just-in-time inventory methods,⁴ the outsourcing of design and innovation not just production,⁵ and the need to meet a variety of competitive challenges including those created by the introduction of high quality Japanese products in the early 1980s.⁶ These changes, in turn, have led to new problems that procurement

¹ Robert B. Handfield, Daniel R. Krause, Thomas V. Scannell, and Robert M Monczika, *Avoid the Pitfalls in Supplier Development*, 41 SLOAN MGMT. REV. 37, 37 (2000) (“As Manufacturing firms outsource more parts and services to focus on their own core competencies, they increasingly expect their suppliers to deliver innovative and quality products on time and at a competitive cost.”); see also *The Economist*, *Outsourcing* (9/29/2008)(Outsourcing “has grown exceptionally fast in recent years . . . In 1946 only 20% of a typical American manufacturing company's value-added in production and operations came from outside sources; 50 years later the proportion had tripled to 60%.”).

² See Susan Helper and Janet Kiehl, *Developing Supplier Capabilities: Market and Non Market Approaches*, 11 IND. AND INNOVATION, 89,89 (2004)Abbie Griffin, *Modeling and Measuring Product Development Cycle Time Across Industries*, 14 J. ENG. TECHNOL. MANAGEMENT, 2 at Table 1 (1997) (listing studies of many companies that found reduced cycle times, and noting that a “1989 study of product development best practices sponsored by the Product Development & Management Association (PDMA) reported that nearly 41% of the respondents indicated that overall, their organizations were developing new products more quickly than they were five years ago”); Jos van Iwaarden and Ton van der Wiele, *The Effects of Increasing Product Variety and Shortening Product Life Cycles on the Use of Quality Management Systems*, 29 THE INTERNAT’L J. OF QUALITY & RELIABILITY MANAGEMENT, 470 (2011) (“Two important trends in the current business climate are increasing product variety and shortening product life cycles”).

³ Jamin N. Jones, Jeff Cope, and Andy Kintz, *Peering into the Future of Innovation Management*, *Research-Technology Management*, 49 (2016) (noting that “[t]he increased pace of technological change and a number of megatrends are reshaping how firms approach innovation.”).

⁴ *The Economist*, *Just-in-time*, available at <https://www.economist.com/news/2009/07/06/just-in-time>; Helper and Keihl, *supra* note 2 at 89.

⁵ See e.g., Pete Engardio and Bruce Einhorn, *Outsourcing Innovation*, *Business Week Online*, (3/21/05) (discussing the trend of large companies outsourcing and offshoring innovation); Zhijian Cui, Christoph H. Loch, Bernd Grossmann & Ru He *Outsourcing Innovation*, *RESEARCH-TECHNOLOGY MANAGEMENT*, 52, 54 (2009) (describing the “continuing trend toward shifting product and service innovation activities outside the firm,” and noting that a “survey of the world’s largest R&D spenders reveals an increasing reliance upon external sources of technology over the last ten years.”); James Brian Quinn, *Outsourcing Innovation: The New Engine of Growth*, 41 SLOAN MGMT REV. 13 (2003) (providing an overview of trends relating to the outsourcing of innovation in a variety of settings).

⁶ For an overview of the competitive challenge posed by high quality Japanese manufacturing, see Robert E. Cole, *Learning from the Quality Movement: What Did and Didn’t Happen and Why?*, 41 CAL. MGMT. REV. 43 (1998). *Id.* at 44, 51(contrasting the pre-1980s American view of quality as being focused on “conformance

contracts have to solve and have fundamentally changed the nature of contractual relationships in manufacturing. Gone are the days of informal relational governance described by Stewart Macaulay,⁷ a world in which contracts were “put in the drawer,” and business was conducted through flexible interpersonal relationships. Today, the work-a-day conduct that is needed to implement modern supply agreements within and across firms is governed by a class of highly detailed written contractual provisions that are designed to administer the contract, coordinate the joint efforts of buyers’ and suppliers’ employees, and facilitate adjustments in light of changing needs.

These provisions—termed here “*managerial provisions*”—closely parallel common techniques used to organize relationships and increase productivity within firms.⁸ Managerial provisions differ from more traditional contract provisions covering subjects such as warranties, indemnities, and limitations of liability, in that managerial provisions do not derive significant value from the threat of legal enforcement.⁹ Although many

to requirements,” with an “emphasis on downstream fixes; quality improvement activities as a limited repetitive cycle of detect and repair,” to the Japanese conception of quality as the outcome of a process, rather than conformance with a “product definition,” a process with “an upstream prevention focus; a well-defined problem solving methodology; training activities tied to continuous quality improvement . . . and emphasis on cross-functional cooperation,” all directed toward “eliminating waste and rework result[ing] in both higher quality and lower cost”).

⁷ Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 AM. SOCIOLOGICAL REV. , 55 (1963).

⁸ The rise of managerial contracting was foreshadowed by Arthur Stinchcombe. See Arthur Stinchcombe, INFORMATION AND ORGANIZATIONS (1990), 194-236 (focusing on the problems that arose in relation to contracts in “construction contracting market[s], the market for weapons R&D, [and] the market for the services of franchised automobile dealers,” Stinchcombe hypothesized that “attempts [will be made] to solve such problems by creating “contractual functional substitutes for hierarchy,” and “writing administrative provision[s] into the contract,” dealing with how aspects of the contracts core “stipulations may be change[ed] by specified methods,” given that “the future is uncertain.”) See also Lisa Bernstein, *Beyond Relational Contracts: Social Capital and Network Governance in Procurement Contracts*, [hereinafter, “*Beyond Relational Contracts* “] 7 J. LEGAL ANALYSIS 561, nn. 35 and 572-76 (2015) (noting that with the exception of fiduciary duty, the aspects of “hierarchical intra-firm structure,” identified by Stinchcombe—namely “labor contracts, fiduciary relations, the exercised right to measure and reward performances, standard operating procedures and decision making and dispute resolving meetings” – are implemented in OEM-supplier outsourcing agreements).

⁹

MOVE Some managerial provisions are, however, backed by “self-help” type interior-remedies. For example, some contracts require that the supplier investigate and remediate failures (both improving compliance and creating an incentive to avoid failures) and others require meetings with executives to discuss failures (providing a personal incentive for contract managers to avoid failures that will be discussed with their superiors). Even when breach of these provisions does not lead to any remedies, the mere fact of noncompliance may provide the buyer with valuable information. For example, plant inspection on demand provisions may reveal valuable information, even when violated as they suggest the supplier may have something to hide which might lead the buyer to activate more of the monitoring and auditing processes the contract entitles him to.

managerial provisions are technically legally enforceable,¹⁰ in practice the obligations they contain are supported almost entirely by either the threat of termination, the imposition of nonlegal sanctions, like reputational harm or reduced order size, or in some relationships, the buyer's right to withhold part of the price (perhaps with a small fine)

Managerial provisions also encompass a subset of terms that create value in ways that are unrelated to the strength of the sanctions, legal or extralegal, that attend their breach. Some can be understood as freeing the employees of one party to take actions that are likely to promote cooperation actions that they might not have taken absent the provision, even if revelation of the information were likely in the firms best interest, out of a fear that if something bad unexpectedly happened they would shoulder a disproportionate share of the blame. Similarly, a failure to attend meetings or to communicate effectively and regularly with one's contracting partner might signal deeper operational or organizational problems.

¹⁰ Some managerial provisions appear in the body of or appendices to written contracts, see *infra* notes __, __ while many others are found in buyer-drafted Supplier Handbooks of various types that are incorporated by reference into either contracts, see e.g., *Master Manufacturing Agreement between NCR Corp. and Jabil Inc.* (providing that "the NCR Supplier Manual" is included in the contract), or purchase orders, see e.g., Ingersoll Rand, TERMS AND CONDITIONS, (incorporating the supplier quality manual by reference); John Deere, JOHN DEERE TERMS AND CONDITIONS FOR THE PURCHASE OF GOODS AND OR SERVICES, U.S. (2019) at cl. 13 (incorporating by reference the terms of the John Deere Quality Manual); Enovation Controls, SUPPLIER MANUAL, at p. 6 (noting that "[e]ach Enovation Controls purchase order outlines the terms and conditions of the purchase. Acceptance of the purchase order implies acceptance of the policies and procedures outlined in this manual."); Donaldson Company, PURCHASE ORDER TERMS NORTH AMERICA (2019) at Cl. 1 (incorporating various handbooks). When included in one of these ways, managerial provisions are legally enforceable to the same extent as any other contract provisions. In practice, however, many core managerial provision are not meaningfully enforceable for any of a number of reasons. Obtaining money damages would require the buyer to prove an amount of damages to the requisite standard of causality and definiteness. The value that could have been provided by smoother operations, more innovation and reduced risk would be difficult to prove to that standard. To terminate, the buyer would need to show that the breach was material, something that would be very hard to show because the legal standard for materiality is along the line of "going to the heart of the contract. The standard for injunctive relief – an affirmative mandate by courts backed by police powers – is higher than the standard for damages or termination. Also, when companies want to continue their relationship, they are unlikely to sue as this tends (intellectual property disputes aside) to end their contracting relationship. As a consequence, while parties may have a credible threat to sue for breach of a contracting relationship, they might not have a credible threat to sue for breach of a particular contract provision (even if it conditioned on verifiable information) unless they want to end the relationship in its entirety and incur the substantial switching costs involved in doing so. For a discussion of the substantial switching costs that may exist in the procurement context especially when joint or supplier led innovation is contemplated, see Ronald J. Gilson, Charles F. Sabel, and Robert E. Scott, *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, 109 COL L. REV. 431 (2009). Finally, it is important to note that if a breached against buyer wanted to sue a supplier for lost profit (an element of damage that is typically waived in these contracts), he would have to prove what that profit was and so would have to disclose his cost structure to his supplier in order to do so. Since this information would be part of the public record, this could be very costly to him as all of the many suppliers who sell to him would be able to find out his profit margin on a particular product and would thus be in a better bargaining position, something that could be quite costly as prices are not fixed in these contracts but rather set on an ongoing basis. For a discussion of the role this "secrecy" interest plays in deterring lawsuits of various types see Lisa Bernstein and Omri Ben Shaha, *The Secrecy Interest in Contract Law*, 109 Yale L.J. 1885 (2000)

when delivery is late or quality is below specifications.¹¹ Together, the use of these provisions has created a degree of convergence between the governance techniques of contract and those of intra-firm hierarchy.¹²

These governance and administration oriented provisions can be found in master agreements, purchase orders, scopes of work, service level agreements, supplier handbooks (or quality manuals), supplier scorecards, and statements of firms' contracting policies and expectations.¹³ Among other things, they set out the processes and procedures to be used to source inputs, manufacture goods, train supplier employees, and monitor suppliers' (and in many instances sub-suppliers) production-related activities. They also set the parameters of the required information exchange between the contracting parties¹⁴ and specify the type and frequency of interactions

¹¹ Others contracts provide for the price to be withheld (sometime with a small additional sum) when deliveries do not conform to quality specifications, are short in quantity, or are delivered late. See e.g., Precision Machine Inc., SUPPLIER HANDBOOK, at 2.6 (listing the categories of chargebacks for certain types of "nonconformance to requirements," and emphasizing that they may "be invoked ONLY where a suppliers product or service does not meet contractual requirements or specifications."); Magna Mirrors, Supplier Handbook, at 3.3 (noting that under the company's "rejects/ chargeback policy," Magna will impose chargebacks when goods do not meet contractual specifications, and that an "administrative fee" of \$500 will be imposed for repeat problems within a twelve month period and a \$1,000 fee if the problem is discovered by a Magna customer, along with a separate charge in those cases where the problem causes shutdown of the Magna production line.) It is, however, important to note that the contract permits imposing chargebacks for late or defective delivery, does not mean that firms will necessarily impose those penalties. See e.g. Bernstein, *Beyond Relational Contracts* (noting that "As one procurement manager [of a large Medical Equipment OEM] explained, her firm tended to impose these fines only when the relationship with the supplier was deteriorating, or when she wanted to get the attention of more senior managers who could see to it that the underlying problem was corrected"). See also David T. Robinson, & Toby E. Stuart, *Network Effects in the Governance of Strategic Alliances*, 23 J. L. ECON. ORG., 242 (2006)(noting that while Allen Bradley, a manufacturer of factory automation parts, adopted a plan to penalize noncompliance with quality metrics by fining suppliers an amount equal to the cost of remedying the defect, it ultimately decided to report, but not collect, the amount of the would-be fine in an effort "to use the figures to foster awareness rather than to assess penalties").

¹² Scholars have begun to document the ways that contracts of various types are being used to organize some types of intra-firm transactions. See e.g., Gabriel Rauterberg, *Contracting Within the Firm*, (Working Paper 2016) (showing that Joint Venture Memorandum of Agreement between two Lockheed divisions was nearly identical to the Memorandum that was adopted between Lockheed and BAE after BAE purchased one of the divisions); Catherine Magelssen, *Allocation of Property Rights and Technological Innovation Within Firms*, STRAT MGMT J. 1, 2 (2019) (finding that Multinational firms "use formal written contracts between subsidiaries [which are legally distinct entities] to assign strategic asset ownership rights").

¹³ Managerial contracting provisions (albeit with a different content) are also commonly used in large-scale information technology outsourcing and business process outsourcing agreement where their potential payoffs may be greater since so many core aspects of parties' relationships cannot be dealt with effectively through more complete contracts in the usual sense because what will be needed in the future is hard to predict and many of the obligations depend on things that cannot be objectively measured.

¹⁴ This information exchange is often extensive and similar to the information that a division within a firm might have about the operations of another division of the same firm. From a legal standpoint, the buyer may have the right to almost as much information about the supplier's operations as the buyer would have

between the buyer's and supplier's personnel. In addition, they contain provisions to guide adjustments to product design, manufacturing processes, quantities ordered, and the materials used. Together, these provisions create conditions that are conducive to joint or supplier-led innovation and to suppliers continuously improving their ability to deliver high quality products while reducing costs and responding flexibly to buyers' changing needs.

At present, there no empirical studies of the prevalence of managerial provisions, the extent to which they are actually followed in contracting relationships, or their effect on the creation of contractual value.¹⁵ However, studies based on the World Management Survey ("WMS"), which is the most comprehensive database of information about managerial practices and firm performance,¹⁶ have documented that within firms, the use or non-use of eighteen particular work-a-day management techniques¹⁷ – as well as the sophistication with which they are implemented – is "associated with large, persistent differences in firm performance"¹⁸ across similarly situated enterprises.¹⁹ Interestingly, each of these eighteen practices has a direct analogue in managerial provisions found in procurement contracts. The striking correspondence between these intra-firm managerial techniques and the terms of supply contracts raises the intriguing possibility that the use of managerial provisions that incorporate these and other intra-firm managerial techniques into contractual relationships may also have a beneficial effect on the creation of contractual value.²⁰ After all, many of the most difficult contracting challenges in procurement relationships are rooted in the need to induce buyer and supplier employees at many levels of each organization to adopt common goals, like continuous improvement, and to work together much as they would if they were all employed by

if it filed a suit for breach of contract and full civil discovery were conducted, which should decrease suits filed as a consequence of asymmetric information. In any event, the capabilities available through electronic information interchange have grown exponentially and long ago exceeded the amount of information that could have been available to the contract managers that Stuart Macaulay studied.

¹⁶ For a copy of the survey instrument and articles based on its findings see <https://worldmanagementsurvey.org/>. See also, Chad Syverson, *What Determines Productivity?*, 49 J. ECON. LIT, 326 at 329, 336-338 (2011) (discussing the design of the WMS and the "steps [taken] to enhance the accuracy and consistency of the survey.").

¹⁷ Nicholas Bloom and John Van Reenen, *Why Do Management Practices Differ Across Firms and Countries?* [hereinafter "*Management Practices*"] 24 J. ECON. PERSPECTIVES (2010) at p.6 Table 1 ("The Management Practice Dimensions.")

¹⁸ Raffaella Sandun, Nicholas Bloom, and John Van Reenen, *Why do We Value Competent Management?* [Hereinafter "*Competent Management*"] Sept-Oct HARV. BUS. REV. 120 (2017). See also, Bloom and Van Reenan, *Management Practices*, *supra* note ___ at 212 ("We found that for our sample of manufacturing firms, higher management scores are robustly associated with better performance.")

¹⁹ *Id.*

²⁰ Without understanding the ways these provisions operate, lawyers cannot evaluate the quality of the contract administration processes that will be used to implement a particular contract, which means they also cannot properly value the contract.

the same enterprise--the very challenges that many of these managerial practices were designed to meet within a firm.

This essay explores the ways that the managerial practices that the WMS found to be associated with intra-firm value creation in the manufacturing sector have been imported into outsourcing agreements. It suggests that in addition to the operational benefits and task-specific incentives they create, these provisions may also meaningfully contribute to contract governance writ large. Taken together they create a transactional framework that is well-structured to support commercial cooperation, enhance network governance, and facilitate the development of process-based inter-organizational "trust." This type of trust arises from "[i]nstitutionalized processes or routines for fairly and reliably dealing with a partner organization,"²¹ that are designed to create stable and predictable expectations. It is associated with "enhanced supplier performance,"²² greater information sharing (which is a needed predicate for supplier-led innovation),²³ and the growth of both interpersonal and competence-based trust.²⁴ It is therefore considered to be a potentially "important source of competitive advantage."²⁵

More generally, the essay suggests that the rise of managerial contracting can be understood, in part, as a response to contracting challenges created by the outsourcing and manufacturing quality movements of the later 1980s and 1990s.²⁶ During this period, American manufacturers not only began to outsource more components, including strategically important components as well as aspects of component design, but also moved from the so-called "old [quality] paradigm,"²⁷ characterized by a focus on

²¹ Jeffrey H. Dyer and Wujin Chu, *The Determinants of Trust in Supplier-Automaker Relationships in the US, Japan, and Korea*, 31 J. INT'L BUS. STUD. 259, 261 (2000)[hereinafter "*Determinants of Trust*"].

²² Akbar Zaheer, Bill McEvily and Vincenzo Perrone, *Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance*, 9 ORG. SCI. 141, 157 (1998).

²³ Jeffrey H. Dyer and Wujin Chu, *The Role of Trustworthiness in Reducing Transaction Costs and Improving Performance: Empirical Evidence from the United States, Japan and Korea*, 14 ORG. SCI. 57, 57 (2003)[hereinafter "*Trustworthiness*"]

²⁴ Zaheer, *supra* note __ at 142

²⁵ Dyer and Chu, *Trustworthiness*, *supra* note __ (concluding based on a study of "344 supplier-automaker exchange relationships," that "trustworthiness lowers transaction costs and may be an important source of competitive advantage."); Jeffrey H. Dyer and Wujinn Chu, *The Determinants of Trust in Supplier-Automaker Relationships in the U.S., Japan and Korea*, __ORG. SCI __ at 259 . *See also*, Zaheer, et al, *supra* note __ at 155 (concluding based on a "sample of 107 buyer-supplier interfirm relationships in the electrical equipment manufacturing industry," that "firms in exchange relationships may derive competitive advantage from relationships imbued with high levels of interorganizational trust," and speculating that the gains come by way of "cooperation in the exploration of new information and coordination technologies, new market opportunities, and product and process innovation.")

²⁶ See John L. Pence and P. Saacke, *A Survey of Companies that Demand Supply Quality*, 42 Annual Quality Congress (1988) conducted for the ASQC (noting that the move towards use of managerial contracting practices was a "response to the challenge of meeting increasingly rigorous quality needs.") For an overview of the quality movement see Robert E. Cole, *Learning from the Quality Movement: What Did and Didn't Happen and Why?* 4 CAL. MGMT. REV. 43 (1998).

²⁷ Cole, *supra* note __ at 44.

“conformance to requirements,”²⁸ and an “emphasis on downstream fixes . . . [and] quality improvement activities as a limited repetitive cycle of detect and repair,”²⁹ to a new paradigm based on Japanese methods.

This new quality paradigm had an “upstream prevention focus.” It viewed quality as something jointly created by buyers and suppliers³⁰—the outcome of a joint and iterative process that began early in the design phase of product development and continued until the part was successfully used in a final assembly. This process was said to work best when it: involved all of a firm’s employees; utilized “a well-defined problem solving methodology;”³¹ required “training activities tied to continuous tied to continuous quality improvement;”³² and used a variety of methods to achieve “cross-functional cooperation,”³³ all in an effort to “eliminat[e] waste and rework result[ing] in both higher quality and lower cost.”³⁴

The changes introduced by the new paradigm required much closer coordination between buyer and supplier personnel at all stages of the design and production process. It also left suppliers with a much smaller margin of error, making traditional contracting techniques involving promises and court imposed damages for non-performance an increasingly ineffective way of governing exchange. Indeed a 1988 study conducted by the American Society for Quality Control concluded that “extensive warranties do not substitute for quality,” and revealed that the companies they surveyed had “reject[ed] supplier contract concessions . . . as ways to better quality.”³⁵ Rather, companies had begun to adopt “a diverse range of methods for ‘managing’ [their] suppliers,” methods that relied on “establishing rigorous requirements and standards,” and “weeding out poor performers,”³⁶ while paying close attention to “suppliers’ demonstrated capability and competence, backed by their good faith and history of commitment.”³⁷ Over time, as technological advances simultaneously decreased the cost of contractual specificity and performance monitoring,³⁸ these practices morphed into some of the core managerial

²⁸ Id.

²⁹ Id.

³⁰ Pence and c, *supra* note __ (noting that where quality was once viewed as a function of a suppliers quality control processes, it came to be viewed as a function of the buyers quality assurance program—many components of which are reflected in managerial contract provisions—as well.)

³¹ Cole, *supra* note __ at 44

³² Id.

³³ Id.

³⁴ Id. at 51

³⁵ Pence and Saacke, *supra* note __

³⁶ Id.

³⁷ Id.

³⁸ Contracting costs have been reduced for example by word processing systems, email, web and video conferencing and document management systems. Enforcement and monitoring costs have been reduced by enterprise systems, connected devices, and exponential reductions in data processing, storage and transmission costs.

practices used to govern procurement contracts today. Their focus is on preventing nonperformance or detecting it early through buyer regulation of and involvement in suppliers' production processes – rather than merely on deterring nonperformance or giving the buyer the right to sue for damages in court. Although suppliers are required to have insurance against product liability related harms (often called epidemic breaches), when it comes to routine contractual nonperformance, the right to sue the supplier will often be of limited value to the buyer. Many suppliers will be judgment proof, buyers want to avoid gaining a reputation for suing their suppliers, and quality problems or production disruptions can lead not only to monetary harm, but also to reputational harm is not taken into account by the legal system.

Part II of this essay describes the ways that the managerial practices described in the WMS are incorporated into procurement contracts. Part III suggests that these provisions, taken together, have the potential to promote commercial cooperation, strengthen the force of network governance, and build the types of interorganizational trust associated with value creation and successful contractual relationships. Part IV considers some of the contract drafting implication of viewing contracts through a managerial lens. Among other things it suggests that contract drafters should focus additional attention on the intrafirm constraints facing managers in each of the contracting parties, as well as the relationship between managers at different levels of both the buyer and supplier firms, if contractual value is to be maximized. Part V concludes by emphasizing that much remains to be learned about managerial contracts, most especially about the ways that the requirements of the contracts and the announced strategies of the contracting parties are implemented in practice.

II. MANAGERIAL CONTRACTING IN INDUSTRIAL PROCUREMENT

The WMS identified “four broad dimensions” of management that were associated with persistent performance differences among similarly situated manufacturing firms,³⁹ plants at the same firm,⁴⁰ and across countries.⁴¹ Namely: “operations management,” “performance monitoring,” “target setting” and “talent management”. Within these categories the WMS looked in depth at the firms’ adoption

³⁹ Sandun et. al, *Competent Management*, *supra* note __ at 122, 123 (noting that “the large, persistent gaps in basic managerial practices we documented were associated with large, persistent, differences in firm performance.”).

⁴⁰ Sandun et. al, *Competent Management*, *supra* note __ at 123 (“[M]anagement practices inside firms across their plants accounted for about one-third of total variations across all plant locations.”)

⁴¹ Nicholas Bloom, Raffaella Sandun, and John Van Reenen, *Management As Technology*, NBER Working Paper No. 22327 (2017).

and implementation of eighteen more specific practices.⁴² Although studies using this data found that “differences in management practices account for about 30% of total factor productivity differences both between countries and within countries,”⁴³ they cannot definitively establish that the use of these practices caused the performance differences. Nevertheless “focused-sample studies at the plant and even the line level suggest that these large-sample results are robust to controls for many other factors . . . identifie[d] as potential determinants of productivity,”⁴⁴ and a recent literature survey noted that “the evidence that management and productivity are related is starting to pile up. . . [and] some of this work strongly suggests that this relationship is causal.”⁴⁵ In addition, some other studies suggest that some of these practices do operate to increase firm value measured in any of a number of ways.⁴⁶

To better understand the ways that these managerial techniques have been formally incorporated into buyer-supplier relationships in the manufacturing sector, it is useful to begin by looking separately at each dimension of managerial activity explored as part of the WMS and the types of contract provisions and other writings that import them into buyer-supplier relationships.

1. OPERATIONS MANAGEMENT

The WMS operations management category focuses on the “use of lean techniques” and the “reasons for adopting lean processes.”⁴⁷ Lean manufacturing “is a multi-dimensional approach that encompasses a wide variety of management practices, including just-in-time, quality systems, work teams, cellular manufacturing, [and]

⁴² The study looked not only at the adoption of the technique but the extent of the adoption. In this essay however, attention is restricted to incorporation or non-incorporation of the technique by way of the relationship’s governing documents.

⁴³ id

⁴⁴ See Robert Gibbons and Rebecca Henderson, *What Do Managers Do? Exploring Persistent Performance Differences among Seemingly Similar Enterprises*, in Gibbons and Roberts, ed., *THE HANDBOOK OF ORGANIZATIONAL ECONOMICS*, 681 (2013). In addition, a study of sixty-two Indian textile firms in which half of the firms were controls and the other half were given intensive management consulting help found that plants that received the intervention, “cut defects by more than 50%, reduced inventory by 20% and average profit by what we estimate to be 50%.” Nicholas Bloom, Raffella Sandun, and John Van Reenan, *Does Management Really Work?* HARV. BUSINESS REV. AT __ (November 2012); id. (“Going from the bottom third to the top third of the group [of firms studied] – was associated with 23% higher productivity”).

⁴⁵ Syverson, *supra* note __ at 339 (providing an overview of the literature on the relationship between management practices and productivity and a discussion of the difficulties of proving causation)

⁴⁶ For citations to studies that make stronger causal claims, see Nicholas Bloom, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patanik, Itay Saporta-Ekstein, and John Van Reenen, *What Drives Differences in Management Practices*, 109 AM. ECON. REV. 1648, 1651 (2019).

⁴⁷ See WMS, 2010 Manufacturing Survey Instrument, at 1-2, available at <https://cdnstatic8.com/worldmanagementsurvey.org/wpcontent/images/2010/09/Manufacturing-Survey-Instrument.pdf>.

supplier management . . . in an integrated system,”⁴⁸ that “finishe[s] products at the pace of customer demand with little or no waste”⁴⁹ and “accommodate[s] customer requests for engineering changes in their product or manufacturing process.”⁵⁰ The extent to which potential suppliers have already adopted core elements of lean processes appears to be important to buyers. It is a common subject of inquiry in the supplier qualification process.⁵¹ However, as discussed further below, it is important to note that lean manufacturing is more than a set of formal practices. For a lean enterprise to operate as it should, employees have to adopt a mindset that is very different from the way they were taught to think when working in a non-lean factory.

Buyers frequently mandate that their suppliers implement lean manufacturing,⁵² and often emphasize particular aspects of lean that they consider to be of critical importance.⁵³

⁴⁸ Rachna Shah and Peter T. Ward, *Lean Manufacturing: Context, Practice Bundles, and Performance*, 21 J. OPERATIONS MGMT 129,129 (2003). See also Jaideep Motwani, *A Business Process Change Framework for Examining Learning*, 103 INDUSTRIAL MANAGEMENT & DATA SYSTEMS, 339 (2003) (describing lean in broader terms as “an enhancement of mass production,” that includes continuous improvement efforts, quality in products and processes, flexible production, and minimizing waste of any kind.”).

⁴⁹ Id.

⁵⁰ John Paul MacDuffie and Susan Helper, 39 Cal Mgt. Rev. 118, 120 (___)

⁵¹ For example, Evoqua, a water technology company, asks potential suppliers “Are Lean Manufacturing principles . . . practiced?” available at: <https://www.evoqua.com/en/about/Pages/Supplier-Portal.aspx>. Similarly, Kaman Aerospace notes in the information given to potential suppliers that their “Supply Management team is open to potential new sources whom have shown a demonstrated commitment to lean.” See Evoqua, “Supplier Qualification Assessment” available at <https://www.kaman.com/fuzing-precision-products/supplier..>

⁵² See e.g., Donaldson, DONALDSON SUPPLIER OPERATING SYSTEM STANDARD, (2019) at 7 (noting that the supply base is expected, “to be organized to have implemented Lean best practices,” in order to “ensure required and stable quality . . . [i]dentify and eliminate waste and non-value added activities, reduce and optimize costs . . . [p]revent shortages . . . [r]educe inventory . . . Secure flexibility of supply, reduce lead times and optimize quantity . . . working with standards which continuously improve.”); See e.g., *Contract between Lucent and Celestica*, supra note __ at Art 21 (requiring Celestica to apply “six sigma’ and ‘lean” practices and commit to a program of continuous improvement); Douglas Auto-tech Corp., SUPPLIER MANUAL (2013) at 1 (“The Supplier shall . . . develop lean manufacturing concepts to reduce the cost of manufacturing.”). Other buyers merely encourage the adoption of lean practices, see e.g., Fort Wayne Metals, SUPPLIER HANDBOOK, at 4.6 (“Fort Wayne Metals is dedicated to continuous improvement . . . [and] had adopted Six Sigma and lean methodologies throughout its global manufacturing operations . . . suppliers [are encouraged]to work with us on Lean and Six Sigma projects at their facilities.”) while sometimes reserving the right to mandate the use of some lean practices when problems arise. See e.g., Enovation Controls, SUPPLIER MANUAL (“Suppliers are encouraged to adopt Lean Six Sigma as a formal improvement process. . . [but] Suppliers with chronic or high value quality issues may be requested to participate in Enovation Controls continuous improvement training.”).

⁵³ See e.g., *Contract between Lucent and Celestica*, supra note __ at Art 21 (requiring Celestica to apply “six sigma’ and ‘lean” practices and commit to a program of continuous improvement). Contracts also explicitly require or suggest that suppliers adopt many practices that are widely considered to be part of lean manufacturing, see Shah & Ward, supra note __ at “Table 1: Lean Practices and Their Appearance in Key References”. For the adoption of Kanban, see e.g., *Master Supply Agreement between Xerox and Flextronics International* (11/30/2001) at 4.2 and 4.3 (“The Kanban Process shall be used for all products designated Kanban Products”); *Supply Agreement between Siemens Magnet Tech and Bruker* (5/15/09) at 6.3 (“The method

To improve existing suppliers' use of lean or assist new suppliers in adopting it,⁵⁴ it is not uncommon for large buyers offer free lean manufacturing training (as well as support for particular process improvements like Six Sigma) to their contracting partners as part of their Supplier Development programs.⁵⁵ In general, both contracts and handbooks put tremendous emphasis on the continuous improvement and cost reduction aspects of lean techniques.⁵⁶

of delivery . . . shall be by way of the kanban system"); just-in-time inventory, see e.g., *Supply Agreement between Maxtor and MMC Tech Inc.* (8/18/98) at 2.7 (requiring supplier to hold a buffer stock "in order to provide just in time . . . delivery"); Cycle time reduction, see e.g., *World Wide Supply Agreement between Honeywell International and Axxess Inc.* (6/20/2003) at c. 8 ("Seller will identify and implement cost reduction opportunities . . . [including] cycle time reduction."), *Supply Agreement between Boehringer Mannheim Corp and Spectrx* (1/5/96) at 8.2 ("The Parties agree to cooperate in an ongoing effort to [achieve] . . . cycle time reductions"); cross functional workforce, see e.g., *Supply Agreement between Amdahl and Encore* (11/21/1994) (requiring the supplier to create and "empower" a cross-functional team with "representative from "Quality assurance," manufacturing," "manufacturing engineering" . . . and materials to deal with eight aspects of "contract execution."); *Master Purchase Agreement between Intel Corp and Aquantia Corp* (1/15/09) ("When applicable, both parties agree to assign cross-functional team members [representing sixteen "disciplines"] to the Product Project. . . includ[ing] employees of each party."); *Sunshine Heart Contract*, supra note __ at 13.1 (b) (permitting communication between cross-functional teams at each company relating to "quality, MRP, operations, purchasing, engineering, and any other matters.") *Total Quality Management*, see e.g., *Southeast Glass Bottle Supply Agreement between Anheuser Busch and Anchor Glass* (8/19/99) ("Anchor shall at all times use reasonable diligence to seek and procure its requirements of all materials and equipment at the lowest available prices manner consistent with prudent management practices, including, without limitation, adherence to total quality management practices and statistical process control."). Handbooks also make explicit mention of lean components, see e.g., Carlsisle, *SUPPLIER HANDBOOK*, at 7, 20 (2018) (requiring supplier to [use] . . . cross-functional teams, JIT inventory, Six Sigma methods, preventive maintenance programs, and a kanban system); Harley Davidson Motor Company, *SUPPLIER QUALITY REQUIREMENTS MANUAL*, at 3 (requiring the use of "cross-functional teams" as part of product development methodology); Littlefuse, *SUPPLIER QUALITY MANUAL*, at 20 (listing "cellular manufacturing" as one of the acceptable ways of achieving continuous improvement); id. at 20 (noting that Littelfuse will help selected suppliers implement lean—including Kanban and 6 Sigma—and that "[o]nce a supplier has been selected, a cross-functional team consisting of Littelfuse and supplier will be formed to work together to ensure that certain targets are achieved").

⁵⁴ Some contracts require suppliers who have not yet adopted lean, to submit plans for doing that are subject to buyer approval. See e.g., *Contract between LMI Aerospace and Boeing* (2003) ("The Seller's Lean Implementation plan must be reviewed and determined acceptable by the SDS and Boeing Procurement Team . . . Seller agree[s] to use the . . . [specified] metrics to establish an enterprise level baseline followed by monthly measurements to evaluate Lean driven cost improvement.")

⁵⁵ For example, Aerojet-Rocketdyne "provides Lean and Six Sigma experts at no cost to [their] suppliers." <https://www.rocket.com/suppliernet/supplier-development>, and Medtronic "offer[s] Lean Sigma training for select suppliers." <https://www.medtronic.com/us-en/about/corporate-governance/suppliers/lean-supply-chain-principles.html>.

⁵⁶ See e.g., Lincoln Electric Company, *SUPPLIER GUIDELINES & EXPECTATIONS*, at 3 (noting that the company expects its supplies to have "a continually improving Quality System;") Ingersoll, *QUALITY MANUAL* at 5.6 ("The process of continuous improvement must be included in the goals and objective of the entire supplier organization."); *Master Hardware Agreement between NCR Corp. and Universal Global Scientific Industrial*, (9/7/18) Sec. 3.3 "Cost Reductions" ("Supplier will continue throughout the Term of this Agreement to use its best efforts to reduce costs for all Products and for Product support, including by meeting the cost reduction goals as set forth in Schedule E."); Harley Davidson, *DOING BUSINESS WITH HARLEY DAVIDSON*, 1

2. PERFORMANCE MONITORING

The WMS looked at five core areas of monitoring: “process documentation, use of key performance indicators (“KPIs”), KPI reviews, discussion of results, and consequences for missing targets.”⁵⁷ All of these processes and practices are sometimes contracted for through the terms of procurement contracts, supplier handbooks, service level agreements, and scopes of work. Many are routinely implemented by buyers as part of their standard and publicly announced operating procedures, their supplier development programs, their supplier scorecard policies or their supplier award/certification programs.

The core objective of managerial provisions is to prevent problems and/or catch them early when losses they cause are likely to be the smallest and the problems that led to them can be most easily remedied. To that end, they have many provisions that regulate, sometimes in excruciating detail, the exact process⁵⁸ (sometimes down to the precise placement of a machine) that will be used to achieve the desired outputs, the way the work-a-day implementation of these processes will be monitored and the means (employed throughout the production process) that will be used to verify that the goods produced meet the contractually specified standards.

Process Documentation & Monitoring Large buyers⁵⁹ typically require detailed process documentation and information sharing throughout (and sometimes after) the performance phase of a supply agreement.⁶⁰ Some of this documentation—such as the paperwork associated with supplier corrective action requests,⁶¹ change orders,⁶² and the production part approval processes⁶³—is required by third-party quality standards, (like ISO 9001⁶⁴) that are typically incorporated into these agreements. Other commonly

(2013) (“Continuous improvement should be a standard process ingrained in the supplier’s business, not simply performed to achieve a requirement of Harley Davidson.”)

⁵⁷ Sandun et. al, *supra* note ___ at 122

⁵⁸ According to Stewart Macaulay, these provisions were not included in the contracts he looked at for his famous study, *supra* note __ and email from Stewart Macaulay to Lisa Bernstein.

⁵⁹ Detailed process documentation is also required by Toyota North America. See e.g.

⁶⁰ See e.g., NCR, Quality, *supra* note __ at 6.1.8 (“Based on the need, on request from NCR, Supplier will provide any necessary documents and/or reports at any point in time.”)

⁶¹ See ISO 9001 (2015) at 10.2.2 (“The organization shall retain documented information as evidence of. . . the nature of nonconformities and any subsequent actions taken . . . [and] the results of any corrective action.”)

⁶² Id. at 8.5.6 (“The organization shall retrain documented information describing the results of the review of changes. . . and any necessary actions arising from the review”).

⁶³ Other paperwork required by the iso included

⁶⁴ ISO 9001 is a quality standard for manufacturing firms that is promulgated by the International Standards Organization. Other commonly designated third party quality standards include the Automobile Industry

required documentation includes the results of supplier self-audits,⁶⁵ records establishing that a buyer's machinery that is located at their supplier's place of business is being maintained and calibrated to the proper standard,⁶⁶ and reporting the KPIs discussed below. Some buyers link their information systems to their suppliers' information systems so they can see KPIs and other supplier-relevant data either in real time or at regular intervals. Conversely, some buyers give suppliers access to parts of their information systems so they can access the buyer's assessments of their performance on a real-time basis.⁶⁷

Buyers also contract for the right to employ boots-on-the-ground monitoring techniques. Contracts routinely give them the right to enter their suppliers' (and sometimes their suppliers' sub-suppliers⁶⁸) plants with or without notice,⁶⁹ either at will or for any of a number of designated reasons—such as supervising production, auditing,⁷⁰ and monitoring the implementation of agreed corrective action tasks. Some

Action Group ("AIAG"). See e.g., KSR International, *SUPPLIER HANDBOOK* (2007) at 1.5 ("The expectations for APQP[advanced product quality planning] for all production suppliers (components, materials tooling, etc.) are summarized in the current edition of the Automotive Industry Action Group (www.aiag.org) methods manual. KSR International reserves the right to require customer specific methods for APQP outside of the AIAG standard."); see also organizations referenced infra note __

⁶⁵ See NCR, *SUPPLIER QUALITY MANUAL* (2015) at 11.2.2 ("Electronic Audit"); *Master Hardware Supply Agreement between NCR and Universal Global Scientific Industrial Co., Ltd.* (6/1/18) at 7.1 ("Supplier will cooperate with NCR in the utilization of measurement tools and data collection designed to assess the performance of suppliers to NCR").

⁶⁶ *Supply Agreement between Navistar and Core Molding Technologies* (11/1/2013) ("Seller will perform normal ongoing maintenance, at Seller's expense, in said tooling, jigs, fixtures and associated equipment for the duration of this Agreement."); Cummins Inc., *SUPPLIER HANDBOOK*, at Section J 2 p. 13 (5/15/19) (setting out detailed calibration and verification processes the supplier must undertake).

⁶⁷ Gordon, *supra* note __ at 192-94[insert example of the firm that rate suppliers day by day and the one where they can benchmark against other suppliers.

⁶⁸ Harley Davidson Motor Company, *SUPPLIER QUALITY REQUIREMENTS MANUAL*, at 2 ("H-D reserves the right to conduct onsite audits of Supplier from time to time to assure continuing compliance with this manual and all quality and process documentation. H-D also reserves the right to conduct onsite audits of a Supplier's Sub-Tier Suppliers that produce H-D product, and Suppliers shall cause their Sub-Tier Suppliers to allow these audits preferably with a representative from the Supplier in attendance.").

⁶⁹ See e.g. *Lucent contract with Celestica Corp.* (2005) Article 29 ("Company may place one or more personnel in Supplier's facility . . . to carry out the functions Company may deem necessary in the portion of the facility in which Supplier kits Material and manufactures, inspects, repairs, distributes and ships Product. . . . includ[ing] access during normal working hours to areas where Product is manufactured, repaired, stored and distributed."); See NCR, *SUPPLIER QUALITY MANUAL* (2015) at 6.4.3. See also *Master Hardware Supply Agreement between Universal Global Scientific Industrial Co., Ltd. and NCR* (6/1/18) 13.2 (with proper notice, "Supplier agrees to allow NCR's representatives or their authorized agents or NCR's customers at any and all times during regular business hours to enter Supplier's facility where Products are produced to inspect the facility, the manufactured Products, and the means for manufacturing Products.").

⁷⁰ See e.g., NCR, *Quality Supra* note __ at 11.2.1 ("Physical Audit"); *Supply Agreement between Apple and GTAT* (10/31/ 2013) at 11 ("During the Term and for two (2) years thereafter, Apple . . . may inspect GTAT facilities and audit GTAT's records to verify that GTAT has complied with its obligations under this Agreement.") See e.g., DAC, *HANDBOOK, supra* note __ at 5 ("providing for the buyers personnel to make

companies, like Cummins, send their own quality engineers to oversee production at their suppliers plant,⁷¹ and Nike “keeps Nike Personnel on site full time at its suppliers facilities,” in an effort to “closely oversee[] the quality and responsiveness of its production units.”⁷² Others buyers have created supplier development or consulting teams that will go into a supplier when a production problem surfaces and remain there until the problem is solved.⁷³ Pratt & Whitney, for example, has “200 engineers [who are] deployed . . . to work directly with suppliers [at their plants] to help them build capacity and improve metrics.”⁷⁴

Additional process monitoring may also occur indirectly by virtue of the production methods selected. For example, the “just-in-time production methods,” that are central to lean manufacturing contribute to monitoring. Because problems that arise “at one station halt production by disrupting the flow of parts to downstream operation[s],”⁷⁵ these methods “render disruptions and defects immediately visible,”⁷⁶ thereby enabling the parties to detect “performance failures and deception before they lead to disastrous consequences.”⁷⁷

KPIs, Discussions and Consequences of Missing Targets Procurement contracts contain a variety of KPIs. At a minimum, these track part per million error rates, on-time delivery, and supplier’s responsiveness to corrective action requests. Buyers typically incorporate some or all of these KPIs into their supplier scorecards – documents issued on a quarterly basis that aggregate supplier performance metrics into a grade like A or B or C. These scorecards (whose use is either mandated by contract⁷⁸ or part of the buyer’s standard operating procedures) sometimes contain subjective components that attempt to capture

both annual visits to the sellers plant as well as when “a suppliers quality rating trends downward,” or other key metrics begin to fall.)

⁷¹ Cummins, *Supplier Handbook*, at __

⁷² James Brian Quinn, *INTELLIGENT ENTERPRISE* (1992) at 45.

⁷³See Jon. R. Stegner, Bill Butterfield and Craig T. Evers, *John Deere Supplier Development Program*. Management scholars have found that these types of programs lead suppliers to have more trust in their buyers. See Jeffrey H. Dyer and Winjin Chu, *The Determinants of Trust in Supplier Automaker Relationships in the US, Japan, and Korea*, 42 J. INT’L BUSINESS STUD. 10, 14 (2011) (According to the suppliers we interviewed [and data from a survey of 453 suppliers] the buyers’ processes for providing regular assistance to suppliers (in many cases helping to fix buyers operational problems) were likely to influence the degree of trust in the buyer.”).

⁷⁴ Thompson, *supra* note __ at 8.

⁷⁵ Id 467-68

⁷⁶ Helper et al. 467

⁷⁷ Helper et al 466

⁷⁸ See e.g., *Contract between NCR and Universal Global supra* note __ at 7.5 (“The Supplier Scorecard will be used as a tool to review and evaluate a Supplier’s performance during quarterly business reviews with Supplier.”) The use of scorecards is also mandated in many supplier handbooks.

qualities like the supplier's attitude⁷⁹ and flexibility.⁸⁰ At John Deere, this subjective component is referred to as "wave length." It is "composite analysis of the supplier's initiative, attitude and responsiveness, attention to detail, communications, and performance."⁸¹ Other companies provide subjective metrics to their suppliers but do not incorporate them into the overall scorecard grade.⁸² Scorecards are reviewed with the supplier in quarterly meetings,⁸³ where the results are discussed (sometimes disputed)⁸⁴ and remedial actions for underperformance or plans for new goals are typically discussed.

Buyer's differ in the way they use scorecard results.⁸⁵ Some use them solely to improve their suppliers' operations. Others set out rewards and punishments of varying degrees of specificity for different scorecard grades. In many companies, the score (or the relative score) affects or determines the amount of the buyer's future purchases or other aspects of the transactors' relationship. At NCR, for example, suppliers with an "A" rating are rewarded with more business or other benefits, while those who score lower might be subject to additional oversight throughout the production and shipping process, face smaller purchases, and/or be required to submit a remedial plan and implement it

⁷⁹ Kohler Engines uses a scorecard based on objective ratings criteria and consequences, but also provides purely a "informational score," that focus on "ease of doing business" and use of "advanced procurement" methods. Kohler Engine, SUPPLIER QUALITY REQUIREMENTS SUPPLEMENT, at 6.

⁸⁰ See Lincoln Electric, *Reading and Understanding the Supplier Scorecard* (describing when an objective or subjective definition of flexibility is used). For an example of a relatively subjective score card see, Northrup Grumman Aerospace Systems, *Supplier Scorecard Guidelines* SG-0110 (2018) (which included "team assessment elements," "responsiveness" and the quality of management among other things).

⁸¹ Deere, QUALITY MANUAL, *supra* note __ at 7; see also, Hengst, Supplier Manual (1/15/19) at 20 (noting that the supplier scorecard "also takes into account so called soft fact from the purchasing area.")

⁸² See e.g. Kohler Engines, SUPPLIER SCORECARD OVERVIEW, at 5, 6 (discussing the provision of a "Subjective Category" that is for "information purposes only and not included in the overall supplier score," that looks at "ease of doing business," which includes such things as "responsiveness . . . governance . . . and technical assistance, " as well as at the supplier's adoption of "Advanced Procurement" techniques including "Electronic data interchange [in each of four areas] and its Leading Edge Procurement Index Score.").

⁸³ These meetings are sometimes explicitly mandated by contract, see e.g., *License, Supply, Manufacturing Agreement between Sunshine Heart and DSM PTG* (4/26/10) at 13.1 (a) (requiring a quarterly business review meeting), or by a handbook, see Generac Power Systems, SUPPLIER HANDBOOK (2018) at 10 (providing that "Generac will schedule business reviews with suppliers," that will cover 15 enumerated areas).

⁸⁴ Wurth, SUPPLIER HANDBOOK, at 2.2 (A "supplier scorecard methodology is used to measure supplier performance . . . [and] scorecard results will be reviewed and discussed with the Supplier during a quarterly business review.").

⁸⁵ Machine at 157 write a note about how similar practice was part of Japanese lean.

on an agreed timeframe.⁸⁶ At some companies, a particularly low grade may trigger the buyer's right to terminate the contract.⁸⁷

In some buyer firms, the scorecard process is similar to the ways that the buyer evaluates and incentivizes their own employees. Consider, for example, Lincoln Electric, a manufacturer of arc welders. Lincoln is considered a paragon of manufacturing quality and efficiency.⁸⁸ Its success is widely attributed to its employee rating and compensation policies. "Most workers earn a piecework wage and receive an annual bonus,"⁸⁹ that is a substantial part of their total compensation. "The Board decides on the companywide bonus pool and individuals then receive shares according to a merit rating system based on four factors—dependability, quality, output, and ideas and/or cooperation."⁹⁰ Similarly, Lincoln's supplier scorecard is based on a weighted measure of four criteria: quality, delivery, the supplier's responsiveness to corrective actions requests, and supplier flexibility (a category that reflects not only metrics but sometimes also includes a "subjective assessment").⁹¹ Lincoln does not explicitly link its scorecard rating to particular consequences. Rather, it uses the scorecards and the quarterly business review meetings it holds with each supplier, to "provide a platform to improve their [the supplier's operations] . . . to achieve world class performance levels."⁹²

⁸⁶ See NCR, QUALITY, *supra* note __ at 6.19 See MilSCO, *supra* note __ at Sec. 1.8 (spelling out the consequences of various scores on its supplier scorecard, providing that suppliers classed as "preferred [score greater than 85%] can get new business . . . growth potential . . . Conditional [score between 70 and 85%] may or may not get new business . . . action plan to improve may be required . . . poorer [score less than 70% possible loss of business . . . action plan for improvement required."); Hengst, *supra* note __ at 20 (discussing the steps suppliers must take and the plans they must submit depending upon their scorecard grade).

⁸⁷ *Supply and Purchase Agreement by and between Engineered Materials Solutions, Inc. And Texas Instruments Incorporated* (10/17/05) at 2 (c) ("BUYER shall have the right to terminate this Agreement if SUPPLIER fails to achieve or maintain the minimum SUPPLIER Scorecard ratings set forth in section 15 for a period of three (3) consecutive months and fails to implement a cure within 60 days.")

⁸⁸ Gh org sci on lincoln.

⁸⁹ Gibbons and Henderson, *supra* note __ at 4.2

⁹⁰ *Id.* at 4.2

⁹¹ The Lincoln Electric Company, SUPPLIER GUIDELINES & EXPECTATIONS, at 9 (2017) [hereinafter LEC GUIDELINES]. Lincoln provides its supplier with detailed information about the rating criteria it uses and the weights assigned to each aspect of the supplier's performance. See Lincoln Electric, *Reading & Understanding the Supplier Scorecard* (1/24/14), available at ___web address. Lincoln Electric, SUPPLIER GUIDELINES at VIIb. "scope" at 8.

⁹² Lincoln, LEC GUIDELINES, *supra* note __ at 8. Interestingly, many firms use scorecards with a similar focus but different metrics to assess their own performance, see Robert S. Kaplan and David P. Norton, *The Balanced Scorecard—Measures that Drive Performance*, 1992 Harv. Bus. Rev. 71 (noting that "the balanced scorecard is like the dials in an airplane cockpit, it gives managers complex information at a glance," including information that "complements the financial measures with operational measures on customer satisfaction, internal processes, and the organizations innovation and improvement activities—operational measures that are the drivers of future financial performance").

To create incentives for suppliers who earn consistently excellent scorecard grades to continue to perform and improve,⁹³ many companies have created supplier status categories and/or supplier awards programs that give suppliers additional benefits. At Pratt and Whitney, suppliers who earn “gold” status, are rewarded with “more favorable commercial terms, lower buffer stock requirements, and directed requests for quotes on new work.”⁹⁴ Similarly, at Rockwell Collins, suppliers who reach “Platinum Premiere” status gain “[a]ccess to executive leadership and program design teams, [b]adge access to Rockwell Collins facilities, [p]referred Engineering Supplier/part list, [p]referred for future sourcing decisions,[and p]ayment term consideration.”⁹⁵ At other firms the benefits of achieving a particular status level with a buyer might include the right to be awarded work put out for bid even if not the low bidder.⁹⁶

3. TARGET SETTING

The WMS also explored a number of practices under the heading of “target setting.” These include the “[c]hoice of targets . . . connection to strategy, extend to which targets cascade down to individual workers . . . [t]ime horizon . . . [l]evel of challenge . . . [and c]larity of goals and measurement.”⁹⁷

As discussed above, target setting and measurement systems enter into procurement relationships through explicit contractual terms,⁹⁸ the requirements of

⁹³ Even after a supplier has reached the highest supplier designation and received public supplier awards they will have a continued incentive to please the buyer since falling out of a buyer’s highest category or failing to re-win an award might hurt the supplier’s reputation with its other buyers.

⁹⁴ Loren B. Thompson, *The New Landscape in American Manufacturing: What it takes to Succeed Today*, at 8 available at <https://www.lexingtoninstitute.org/wp-content/uploads/2016/01/New-Landscape-in-American-Manufacturing.pdf>.

⁹⁵ Rockwell Collins, ROCKWELL COLLINS TRUSTED SUPPLIER PROGRAM (2012). available at <https://www.rockwellcollins.com/~media/Files/Unsecure/Resources/Supplier/Trusted-Supplier-data-sheet-110812.aspx>.

⁹⁶ See e.g., Rickert, Jeffrey, Joel Rogers, Darya Vassina, Josh Whitford & Jonathan Zeitlin, *Common Problems and Collaborative Solutions: OEM-Supplier Relationships and the Wisconsin Manufacturing Partnership’s Supplier Training Consortium*, Center on Wisconsin Strategy Paper, at 17 (2000) (Ariens Corporations’ suppliers reaching a certain rating level are awarded work when they are within 5% of the lowest bidder); Aberdeen Group, *The Supplier Performance Measurement Benchmarking Report*, http://www.lyonsinfo.com/_resources/aberdeen_spms_report.pdf (Dec. 2002) (noting that “enterprises often give new business proposals (i.e., “bids”) from preferred suppliers additional weight, allowing preferred suppliers to win new business without necessarily being the lowest priced offer.”).

⁹⁷ WMS *supra* note __

⁹⁸ Independent of the scorecard, failure to meet certain targets, may have its own, contractually specified, consequences. At NCR, for example, when the PPM error rate is exceeded, the costs associated with the errors are “charged back” to the supplier. NCR, NCR QUALITY, *supra* note __ at 6.16 (these costs include: “[p]roduction loss, expedited freight costs, rework cost, field replacement/repair cost, administration cost and any other associated cost.”) And, when repeated quality issues arise, the supplier may be put on “controlled shipping” status. Depending on the severity of the suppliers’ problems, this might include a

supplier handbooks, and the scorecard process. Many contracts also include a variety of particularized targets along with rewards and punishments for meeting or failing to meet them.⁹⁹ Supply agreements also contain strategically important targets like process improvement targets, longer-term innovation related targets as well as cost reduction targets.¹⁰⁰ It is also not uncommon for agreements to express the hope that the supplier and buyer will continue to do business in the future with respect to new products even though there is no indication in the contracts that either party has a clear (or perhaps any) idea what those future products will be.¹⁰¹

Moreover, best practices suggest that buyers share information about strategy and business goals with suppliers, along with a great deal of additional information, especially if the buyers expect the supplier to innovate on its behalf.¹⁰² Some buyers mandate the dissemination of this information throughout the supplier's workforce. The John Deere manual states that "the [supplier's] training should provide employees with an awareness of the relevance and importance of employees activities and how employees contribute to the achievement of quality objectives in the buyer's business plan."¹⁰³ Broad statements relating to strategic goals can also be found in these agreements,¹⁰⁴ and these understandings are also discussed during the negotiation of

"100% redundant inspection process," sometimes by an "outside third party" and a requirement that the supplier identify the "root cause" of the problem and solve it within 90 days. *Id.* at 15.2.1-15.3. NCR also varies the frequency of on-site assessments on the basis of "the assessment score during the initial assessment" but "irrespective of the previous assessment score," it reserves the right to conduct a "reassessment at any point of time based on the Supplier's parts Quality performance which impacts NCR business." *Id.* at 7.4.4 Conversely, meeting or exceeding other targets comes with benefits. NCR varies its degree of production oversight of particular parts depending on the suppliers' performance on buyer-conducted quality audits. When certain quality levels are achieved the part is added to a Capable Part Program that permits production to proceed with fewer oversight hurdles until a quality problem is detected in which case additional oversight is reinstated.

⁹⁹ [cite]

¹⁰⁰ [cost reduction expectations]

¹⁰¹ See e.g., *Supply Agreement between John Deere and Titan Tires* (4/15/2011) at Cl. 1 ("As used herein, the term "products" shall mean those tires and parts listed on Attachment I. . .[and] any other products which may be added to Attachment I by Deere and Titan from time to time by mutual agreement.")

¹⁰² The information sharing provisions of procurement contracts...here braiding deal with it.

¹⁰³ John Deere, *Supplier Handbook* (Version JDS-G223) at 5.3.3. Similarly, Milsco's handbook has a section title "Supplier Management Responsibility" that among other things charges the supplier with ensuring that Milsco's **goals are made known to their employees and that steps are taken to ensure they are met.** "See Milsco, *SUPPLIER QUALITY REQUIREMENTS MANUAL* (2014), at 1.1 ("Supplier management shall ensure that Milsco needs and expectations are determined, converted into requirements.")

¹⁰⁴ See e.g., *General Supply Agreement between Advanced Technologies Inc. and Lucent Technologies Inc.* (5/11/20) at 5.2.2 "Corporate Strategies Important for Achievement of Strategic Goals."

service level agreements¹⁰⁵ and scopes of work¹⁰⁶ as well as during quarterly business reviews¹⁰⁷ and as parts of supplier development programs.¹⁰⁸

The ways and extent to which the agreement's strategic objectives and its more precise targets cascade down to lower management and line employees varies widely.¹⁰⁹ Some firms use contract management software that enables employees to readily access those parts of agreements that are directly relevant to their job without reading the entire agreement. Some systems even assign an icon to provisions dealing with particular aspects of a deal like quality or finance so employees can access areas of interest with the push of a single button.¹¹⁰ Quality targets can also cascade down to employees at the contract implementation and hand-off meetings held at some firms, where in-house lawyers review the agreement with the relevant employees and create a written summary of the contract's core operational terms.¹¹¹ Alternatively, as at Johnson Controls, the buyer may designate a supplier employee (called the "supplier champion") whose "job [it] is to understand JCI expectations, demonstrate an acceptable level of competence in the tools and techniques [JCI requires], and be capable of disseminating that knowledge to the rest of the [suppliers'] organization."¹¹² The champion must complete all training classes the buyer deems necessary. And, if he or she leaves the employ of the supplier, a new champion must be appointed. The champion can be understood as a relational complement to the contract's specific terms. He functions as a contract provision himself by importing a range of understanding of the buyer's needs and expectations into the relationship even though they are not fully or adequately captured through written documentation alone.¹¹³

In sum, from a broad operational perspective, the practices discussed above, give buyers a clear view of their suppliers' actions throughout their contracting relationship.

¹⁰⁵

¹⁰⁶

¹⁰⁷ Find textbook documentation and weave more explicit adherence to *Connection to Strategy*

¹⁰⁸ See e.g., Generac, HANDBOOK, supra note __ at 2 ("Generac Power Systems, In. has created a supplier management program that is designed to align suppliers with our company's Strategic Plan.")

¹⁰⁹ See JIC Manual *Supra* note__ sec. 2.4 at 7 ("The supplier and their sub-tier suppliers should have an effective process to cascade customer specific requirements").

¹¹⁰ See Lisa Bernstein, *Merchant Law for a Modern Economy*, in Sapari and __ed. *The Philosophical Foundations of Contract Law*

¹¹¹Id. (describing the contract handoff process)

¹¹² Robert B. Handfield, Daniel R. Krause, Thomas V. Scannell and Roberts M. Monczka, *Avoid the Pitfalls in Supplier Development*, SLOAN MGMT. REV., 37, 43 (Winter 2000).

¹¹³ The use of people as contract provisions deserves more serious attention. Sometimes they can be used to fill in gaps when the contract is silent while other times they can bond contractual obligations in ways that written agreements cannot. A wedding planner, for example, who works in a small town, who contacts repeatedly with a bakery, provides a must stronger inducement for the actual cake to taste like the sample than any contract ever could—while one cannot define "taste the same" the baker is unlikely to intentionally breach or fail to take precautions (as by using substandard ingredients) as upsetting the wedding planner is likely to lose her the planner's future business.

Many buyers have at their fingertips computerized dashboards that are directly linked to their suppliers' information systems. These dashboards display summary statistics about their operations and production runs on a real-time basis. In the past, this information would only have been verifiable through filing a lawsuit and engaging in civil discovery. It would not have been observable to the buyer during the course of the relationship. Today, in contrast, it is observable in real-time, thereby reducing the asymmetry of information that may lead to broken relationships or lawsuits.¹¹⁴ Together with the wide variety of boots-on-the-ground monitoring systems and periodic performance reviews required by these agreements, the availability of this real-time information should enable transactors to catch problems sooner rather than later and prevent the largest possible harms from arising.

4. TALENT MANAGEMENT

The WMS focused on a number of aspects of talent management including, "talent retention," "talent development," "[e]mployee value proposition" and "[st]retch goals . . . [and] management of low performance."¹¹⁵ Although procurement contracts emphasize that suppliers are independent contractors not employees, many buyers seek to play an active role in their suppliers' staffing choices, the training or training requirements of their personnel and other aspects of human resources decision making.¹¹⁶ Their actions in this area are, however, tempered by their fear that their suppliers may lose their independent contractor status. This would expose the buyer to possible liability under the "joint employment" or "co-employment theories," used by courts to distinguish employees from independent contractors.¹¹⁷ As a consequence, talent management is one

¹¹⁴ Although economic modelers have paid attention to the effects of contracts provisions that condition on information that is observable but not verifiable, they have not paid similarly close attention to provisions that condition on information that is verifiable (during the discovery phase of a lawsuit) yet not observable to the parties without filing a lawsuit.

¹¹⁵ *Supra* note __

¹¹⁶ Typical buyer-issued suppliers' codes of ethics require compliance with local labor laws and prohibit the use of child labor. See Wurth, *SUPPLIER HANDBOOK*, at 1.4 (prohibiting suppliers from using child labor, forced labor or prison labor) Many also require "suppliers [to] respect the applicable principles of freedom of association and collective bargaining." Harley Davidson, *HD SUPPLIER CODE OF CONDUCT* (1984).

¹¹⁷ In 2019, the Department of Labor proposed changes to the existing regulations that were designed to "promote innovation and certainty in business relationships," in light of the fact that "[t]he modern economy involves a web of complex interactions filled with a variety of unique business organizations and contractual relationships." [insert cite] If adopted, these changes will put some existing managerial provisions (like those dictating aspects of the supplier's workplace practices) on a safer legal footing. They will also open the door to some new types of managerial provisions with the potential to fine tune the incentive alignment of the supplier's employees with the buyer's contractual goals. Nevertheless, as currently formulated the proposed changes do not go far enough to enable contracting parties to unleash the full power of managerial contracting confident that in doing so they will not bear excessive legal risk under these regulations. Conversely, is also important to keep in mind that within firms "[l]abor

area where internal controls and external controls, while similar, are not perfectly matched.

Nevertheless, despite the current state of the law, some buyers actively seek to control aspects of their suppliers management structure.¹¹⁸ Milsco, for example, requires its suppliers to “appoint a member of the supplier’s own management with the defined authority to,” oversee and monitor defined aspects of the supplier’s quality system and to deal with problems that arise.¹¹⁹ Some buyers also evidence a concern with their suppliers’ human resources policies – these policies are carefully reviewed during the supplier selection process,¹²⁰ and many handbooks require not only compliance with the law but also the provision of safe working conditions, preservation of the right of association and the avoidance of child labor.¹²¹ In addition, it is not uncommon for buyers to require or urge their suppliers to employ a diverse workforce.¹²²

regulations . . . can make it difficult to give opportunities to employees on the basis of merit or to adopt performance-related compensation.” Sandun et al., *Competent Management*, *supra* note _ at 134

¹¹⁸ JIC, [insert] *supra* note __ at 4.1 (“Management Responsibility- Supplier management at highest levels shall demonstrate involvement and support for process efficiency, customer focus, quality policy, planning, defining responsibility, authority and communication and management review”); Deere, Handbook, *supra* note __ at 4.4.1-4.4.4 (“Top management shall take an active role in the quality management system. This commitment shall address the managerial processes of quality planning, quality control, and quality improvement,” and requiring them to provide “documented evidence” of its commitment to doing so by following thirty-five enumerated steps, and employing “a sound quality system,” that “shall be structured by a proven methodology such as ISO 9001, ISO/TS 16949, The Malcom Baldrige Criteria for Performance Excellence, the Deming Prize, or the European Foundation for Quality Management.”) See also, Toyota 1.1 (requirement 2) (providing that “[a] permanent management lead position must be established or designated as the executive management representative for overall quality assurance,” and setting out the obligations of the manager as well as requiring that a succession plan for the position be in place).

¹¹⁹ Milsco, HANDBOOK, at 1.1 (“ensure that a quality system is established, implemented and maintained . . . report the performance of the quality system to the suppliers’ management for review and at sufficient intervals to serve as a basis for improvement and to detect performance degradation . . . [and] respond to Milsco inquiries reference containment, resolution and implementation of permanent corrective actions due to non-conformities.”). See also *Manufacturing and Supply Agreement between Colzatur Fico MAB and St. John Skirts* (11/9/96) (providing that MAB shall employ at its own expense, at least one full time employee or consultant fluent in English to handle St Johns Telephone and written communications.”)

¹²⁰ See e.g., Ranir, SUPPLIER HANDBOOK, (noting that a supplier’s “human resources” practices are taken into account in the supplier selection process); Rotok, SUPPLIER HANDBOOK, at 6 (.).

¹²¹ John Deere, John Deere Supplier Code of Conduct (___) at __2; Johnson Controls, JIC Manual, *supra* note __ at 5.7.1 at 10 (requiring that “the use of Personal Protective Equipment is defined and in place”) Johnson Controls, [insert] 3.3. (“Suppliers should treat workers with dignity,” “maintain workplaces free of physical or mental harassments, abuse or any other behavior that diminishes a person’s integrity and self-esteem.”)..

¹²² For example, Coca-Cola has created a supplier development programs whose “objectives are to build capabilities and capacity of diverse suppliers to enhance their competitiveness and support growth in these communities.” See Coca-Cola, 2018 Sustainability Report at 1

Talent Development Buyers take a variety of steps to promote the development of their suppliers' employees' talents and skills.¹²³ Many encourage¹²⁴ or require suppliers' employees to participate in buyer-run training programs.¹²⁵ Others provide direct hands-on training or assistance at the plant level.¹²⁶ Still others, like Harley Davidson, have programs where the suppliers' engineers work out of the buyer's premises so they can interact with the buyer's engineers on a daily basis.¹²⁷

Caterpillar, for example, runs a Supplier Development college (with both live and e-learning) that "offers a variety of classes for new suppliers designed to increase their understanding of Caterpillar's contract requirements, quality standards, and unwritten expectations."¹²⁸ Deere has provided webinars and online tutorials to help suppliers understand their quality and other expectations.¹²⁹ Deere also has an extensive Supplier Development program in which a "Supplier Development engineer trains supplier personnel as necessary in techniques of problem solving that can be used for particular projects," as well as in "future [projects] without the involvement of Deere."¹³⁰ Pratt & Whitney also trains their suppliers through the "on site" support provided by its "200 engineers [who are] deployed . . . to work directly with suppliers to help them build capacity and improve metrics."¹³¹

¹²³ See e.g., JIC Manual, *supra* note __ at section 5.2-5.3 at 9 (imposing "Supplier Training Requirement[s]" and discussing the way that training on the job is to "be conducted and documented").

¹²⁴ See Letter from Navistar to Navistar Suppliers, (6/6/14) (announcing that "Navistar has developed and instituted a training program hosted on the internet that takes our quality expectations beyond statements of expectations to training in the important aspect of quality that will deliver to our expectation," and mandating that all key supplier personnel are trained and tested to ensure that "our quality deliverables are clearly understood." Navistar also warned suppliers that participating in this program "will be a significant condition in the decision to continue doing business").

¹²⁵ These requests or mandates can be found in Supplier Handbooks, see Generac, SUPPLIER HANDBOOK, at 2 (describing the Supplier Development Program that is part of the company's Supplier Management Program), and Master Agreements, see *Contract between John Deere and Stanadyne* (2007) ("STANADYNE CORPORATION agrees to participate in the John Deere Power Systems . . . Supplier Development . . . Team Program to reduce cost of products supplied to DEERE.").

¹²⁶ See *infra* note __

¹²⁷ See Bernstein, *Beyond Relational Contracts*, *supra* note __ at __ (describing the way Harley embeds its suppliers' engineers into its organization).

¹²⁸ Bernstein, *Beyond Relational Contracts: Social Capital and Network Governance in Procurement Contracts*, 7 J. Legal Analysis 571, at 578-80. Similarly, Polaris provides its suppliers with courses through the online University of Polaris which "leverages an extensive course catalog to facilitate an understanding of Polaris expectations, requirements of the business relationship and to establish the manner in which business between Polaris and its suppliers is established." https://www.polarissuppliers.com/supplier_training.asp.

¹²⁹ *Id.* at __ Harley Davidson's supplier manual also refers to webinars designed to assist its suppliers in implementing its many requests in an integrated way. See Harley Manual, *supra* note __ at 3 ("Suppliers are required to review the "A_P_Q_P_v_s_M_9_" webinar, located on H-DSN.com.")

¹³⁰ See Jon. R. Stegner, Bill Butterfield and Craig T. Evers, John Deere Supplier Development Program.

¹³¹ Thompson, *supra* note __ at 8.

Other buyers require their suppliers to offer “opportunities for training and continuing education to improve employee’s skill level,”¹³² either in general or in particular areas such as “cross training to ensure product quality.”¹³³ Deere suppliers are required to provide “a system of ongoing monitoring of each employee’s education, training and work experience and provide opportunities for training and continuing education to improve employee’s skill level.”¹³⁴ And, as Deere’s handbook notes this training should be designed to “provide employees with an awareness of the relevance and importance of their activities and how they contribute to the achievement of quality objectives in the business plan”¹³⁵ Ingersoll too imposes similar requirements.¹³⁶

Talent Retention Many supply agreements attempt to incentivize suppliers to retain particular talented employees through “key personnel” provisions.¹³⁷ These provisions designate named supplier employees to have authority over various aspects of the contract and give the buyer a role – often veto rights – in the selection of replacements (as well as in their training¹³⁸) when key personnel depart the firm. Some supply chain managers consider these provisions among the most important terms in an outsourcing relationship.¹³⁹

Employee Value Proposition Many large firms go to great lengths to emphasize aspects of their “employee value proposition,” to prospective employees. While definitions of this term vary,¹⁴⁰ the WMS emphasizes three key elements found in most definitions of the

¹³² Deere new 5.3.2

¹³³ Deere new 5.3.4; Adidas Group, THE ADIDAS GROUP SUPPLIER TRAINING PROGRAM (“[t]he group has initiated a complex system of multi-level and cross-functional training sessions with its network of suppliers around the world.”); Ingersoll-Rand, Global Supplier Quality Manual (requiring suppliers to provide “appropriate training to ensure that employees are all competent and qualified to produce quality deliverables,” and to “managing employee records of training, performance metrics, and skills.”

¹³⁴ Deere Quality Manual (2009) Sec. 6.2 “Human Resources.”

¹³⁵ Id.

¹³⁶ Ingersoll Rand, SUPPLIER HANDBOOK at 2.1 (“The supplier shall provide appropriate training to ensure that employees are competent and qualified to produce quality deliverables. The supplier shall review and document the required skills and competencies necessary for the production, inspection, handling, and delivery of products to Ingersoll Rand and/or its customers. The supplier shall provide appropriate training to ensure that employees follow applicable processes and instructions. The supplier shall maintain employee documented information of training, performance metrics, and skills.”)

¹³⁷ *Major Equipment Supply Agreement between Southeast Renewable Fuels and Sim Argo*, at Sect. 4.7 (2/19/19) (“Major Vendor shall ensure that key personnel . . . are not assigned to other projects to the detriment of the Major Vendor Services. Except for key personnel who leave Major Vendor’s employ, Major Vendor may not remove the key personnel from participation in the Major Vendor Services without first notifying Owner and demonstrating that a change in personnel will not adversely affect performance of the Major Vendor Services.”)

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¹³⁹ stella

¹⁴⁰ See e.g. Kristina Martic, *Employee Value Proposition (EVP): Magnet for Attracting Candidates* (2018) (“EVP . . . is a set of values that you, as an employer, offer to your employees, and use as a magnet for attracting

term – a focus on what makes the particular firm a distinctive place to work, how the firm attempts to convince prospective employees to join it, and how employees feel about working at the firm.¹⁴¹ Large buyers provide prospective suppliers with manuals extolling the firm’s values, including its sustainability policies, its attitude towards local communities, child labor, and its orientation towards viewing suppliers as collaborative partners, not merely parts providers.¹⁴² Ingersoll, for example, encourages both its suppliers and its employees to maintain the firm’s core values, “[i]ntegrity . . . [r]espect . . . [t]eam work . . . [i]nnovation . . . [and c]ourage.”¹⁴³ Some firms, like Rocketdyne, emphasize that employees and suppliers should adopt the same standards of conduct.¹⁴⁴ In addition, just as firms survey their own employees to assess their contentment and what they find problematic in their work environment,¹⁴⁵ so too firms are beginning to survey their suppliers to learn more about problematic aspects of their contracting relationships.¹⁴⁶

Rewarding Talent/ Removing low performers As discussed above buyers have devised a variety of ways to reward their best suppliers. They give exceptional suppliers increased business and sometimes higher prices. Buyers have also created supplier awards that are often reported in the trade press. And, while many contracts prohibit a supplier from

new hires. Besides attracting candidates, your Employee Value Proposition (EVP) can help you engage and retain employees.”) <https://www.talentlyft.com/en/blog/article/105/employee-value-proposition-evp-magnet-for-attracting-candidates>

¹⁴¹ WMS survey instrument, *supra* note __ at Question 17. For a list of the characteristics of a firm typically considered an important part of the employee value proposition, see Elizabeth G. Chambers, Mark Foulon, Helen Handfield-Jones, Steven N. Hankin, and Edward G. Michaels II, *The War For Talent*, 3 MCKINSEY QUARTERLY 44 (Nov. 3 1998) at Exhibit 2 (listing nineteen components of the EVP executive consider important, including “Values and culture. . . Good at development . . . Inspiring mission,” as well as aspects of compensation and work life balance).

¹⁴² See e.g., Ranir, *SUPPLIER HANDBOOK*, at 1 “Partnership, Honesty, Trust” (“Ranir. . . believe[s] in a key supplier alliance and aspire for our suppliers to become our strategic partners. Our goal is to create long term partnerships through a rigorous and collaborative approach requiring honesty and integrity. In doing so, we ask for two-way communication, innovation in our products, quality and sustainability and fast reaction times.”); Cooper Tire & Rubber, *GLOBAL SUPPLIER GUIDEBOOK*, at 3 (describing the “Cooper Way” of partnering with suppliers including commitments to “help each other succeed. . . have engaged Communication . . . be agile . . . provide world class service . . . be results focused . . . do the right thing” the same “Cooper Way” that is found in the Cooper Code of Conduct for its employees).

¹⁴³ These values are articulated in Ingersoll Rand’s, *CODE OF CONDUCT FOR BUSINESS PARTNERS* and its *CODE OF CONDUCT* (which defines “how we [Ingersoll] interact with our customers and suppliers . . . [and] how we treat each other in the workplace and how our values guide our business decisions”).

¹⁴⁴ Aerojet-Rocketdyne, *SUPPLIER CODE OF CONDUCT* (“set[ting] forth the expectations. . . for every third party who works on our behalf and reflect[ing] the standards we set for our own employees.”)

¹⁴⁵ See Brad Power, *Why John Deere Measures Employee Morale Every Two Weeks*, *Harv. Business Rev.* (5/24/16) (noting that Deere surveys the morale of its employees every two weeks).

¹⁴⁶ Jonathan Webb, *How Do You Measure the Voice of the Supplier*, *Forbes* (2/1/18) (discussing the efforts firms are making to conduct Voice of the Supplier surveys).

disclosing its relationship with a buyer, buyers can reward high achieving suppliers by giving them the right to make known superior supplier status and association with the company known—something that can be very valuable if the buyer is known, as firms like Deere and Apple are, for being a stickler for quality, since it enables them to market themselves to other buyers on the basis of having satisfied these buyers.

Similarly, buyers have also developed ways of putting pressure on underperforming suppliers. Underperformance is commonly dealt with through the supplier score card process¹⁴⁷ and/or the imposition of interior remedies like charge backs,¹⁴⁸ until it reaches a point where the buyer wishes to terminate the relationship. It is very common for these agreements to give buyers (and occasionally suppliers) liberal rights of termination.

Conclusion In sum, the management practices that the WMS associated with the creation of value within firms have been widely imported into inter-firm relationships. This has resulted in a degree of formal convergence between the governance techniques of contract and important aspects of the governance techniques of intra-firm hierarchy.¹⁴⁹

Nevertheless, whether these formal terms will create similar value in context of any particular contracting relationship is difficult to predict. As the management literature has pointed out, a firm's ability to benefit from an internal decision to adopt particular management practices (including many that are part of the WMS) is likely to depend, at least in part, on the state of the relational contracts within the firm.¹⁵⁰ Similarly, when these practices are imported into a contracting relationship, their effectiveness is likely to depend not only on the relational contracts within each entity, but also on the relational ties between the firms and between each of the firm's employees at many different levels of their operations.¹⁵¹ It may also be strongly affected by the structure of the network of

¹⁴⁷ See Milsko *supra* note __ at 1.8 (noting in regard to the supplier scorecard that “The rating system will also be used internally by Milsko purchasing as a guide for current and new business sourcing decisions.”)

¹⁴⁸ Charge-back provisions give the buyer to withhold a portion of the price when certain contractually specified criteria are not met. See e.g., [insert charge back footnote]

¹⁴⁹ This essay has focused on the aspects of hierarchy that were explored in the World Management Survey, yet is important to note that there are other perspectives on internal firm management that identify many additional important aspects of hierarchy. [insert]

¹⁵⁰ Gibbons and Henderson, *supra* note __

¹⁵¹ Consider, for example, a provision that requires suppliers to adopt lean manufacturing practices. As the experience of the US automobile industry's attempts to shift from mass to lean production in the 1980s reveals, many of the steps needed to produce a true lean transformation cannot be simply imposed by contract or even dictated by fiat within a firm. See James P. Womack, Daniel T. Jones and Daniel Roos, *THE MACHINE THAT CHANGED THE WORLD*, (1990) (providing an overview of what is needed to implement the lean production techniques pioneered by Toyota and adapted by US auto companies) If lean practices are to encourage the type of “pragmatic cooperation,” that “advance[es] knowledge [,] curb[s] opportunism,” and thereby creates long term value, formal changes to organization structure and practice will not be enough. Rather, these changes must be accompanied by a fundamental attitudinal shift on the part of both workers and managers. *Id.* at 100 (noting that “studies of plants trying to adopt lean production reveal that workers respond only when there exists some sense of reciprocal obligation, a sense that management

ties around both the contracting firms in the relevant market as a whole or among all or most of their suppliers, perhaps in a suppliers' association.¹⁵² As a consequence, while most of the eighteen practices identified by the WMS have the potential to improve the governance of contracting relationships, just how much value they or any other managerial provisions will add to any particular relationship remains an open question and one worthy of further inquiry.

III. MANAGERIAL CONTRACT GOVERNANCE

Although individual the managerial provisions in the WMS have the potential to add value to contracting relationships, taken together these provisions may create governance benefits that go beyond the incentive effects associated with individual provisions.¹⁵³ The reason is simple. These practices create conditions that make it more likely that commercial cooperation will arise and endure, strengthen the force of network governance, and facilitate the emergence of the type of inter-organizational process-oriented trust that has been associated with more productive outsourcing relationships and the creation of both competence-based and interpersonal trust.

actually values skilled workers, will make sacrifices to retain them, and is willing to delegate responsibility to the team.”) This change can be exceptionally difficult to bring about since a successful lean transformation will enable firms to do more with fewer inputs and workers. Lean also requires workers to learn a broader set of skills that are less transferable to other firms than the more specialized skills they acquire in a more traditional plant. Machine at __As a consequence, workers and managers have to be convinced that that if they make the attitudinal shift and firm specific knowledge investments that true lean techniques require, they will not be fired as productivity per worker increases. As the US auto industry transitioned to lean, implementation was impeded by the difficulties supplier faced in attempting to convince their workers that a successful lean transformation would not be followed by layoffs. This may be why when Honda supplier development goes into a US supplier's plant to introduce lean it requires a commitment from the supplier not to lay off employees as a condition of its investment of resources. MacDuffie and Helper at 125 This may also be a reason that an important customer might be able to get a supplier to adopt lean, when the supplier could not do so on its own—workers may trust a buyer like Honda (known for its strong relational contracts with its suppliers) to protect them, even where they would not trust their own employer to do so. Even when the buyer firm does not have a reputation like Honda, the transformation may be easier to achieve when imposed from outside the firm as a supplier who does not follow the dictates of a large buyer is likely to forgo or lose its business, a consequence that may fall heavily on workers.

¹⁵² For a discussion of the ways that the structure of the network around contracting parties effects the conduct of their work-a-day relationships see Bernstein, *id*, *supra* note __.

¹⁵³ The management literature has also suggested that the presence of a core group of these practices may simply be a signal that the firm is well managed in any of a number of ways.**insert cites to this literature**

1. COOPERATION

Managerial contract provisions have the potential to increase the likelihood that commercial cooperation once established, will endure.¹⁵⁴ The clarity of the contract's operational terms together with the buyer's efforts to teach their suppliers exactly what is expected (in terms of both manufacturing process and output) and the many open communications channels between buyer and supplier employees that are created, should reduce the risk of misunderstandings, thus reducing the likelihood of relationship breakdown from disparate understandings of process and product requirements. And, as a consequence of the many steps throughout the product design and production process that are closely monitored by the buyer, any misunderstandings that do arise are likely to be caught early in the design and production process.¹⁵⁵ Early detection in turn, reduces both the harm caused as well as the cost of remediation. Moreover, when problems do arise, as they inevitably will, the fact that many agreements give buyers the right to ask for a root cause analysis (a structured process designed to reveal the root cause of a problem),¹⁵⁶ may, together with broad audit and inspection rights, give them a better sense of whether the problem was the result of opportunism, a mistake, or an operational problem that can (or cannot) be remedied, thereby reducing the likelihood that cooperation, once established, will break down due to misclassification of an outcome or problem as an act of defection.

Finally, and perhaps most importantly from a cooperation-inducing point of view, the many documents constituting the contract along with the buyer's announced scorecard policies, can be understood as giving suppliers a sense of the strategy a buyer will play in response to particular types of bad outcomes¹⁵⁷ – such as cutting its buy until the

¹⁵⁴ For a discussion of the ways that commercial cooperation is created in these relationships see Bernstein, *id.*, *supra* note ____.

¹⁵⁵ Do a note explaining based on Machine how lean production catches errors early

¹⁵⁶ See e.g., *Contract between NCR Corp and Universal Global Scientific Industrial Ltd.* (6/1/2018) (providing that a "Closed Loop Corrective Action (CLCA) . . . may be triggered by the discovery of a Root Cause Analysis problem from any source . . . engineering test failures, manufacturing failures, or field failures"); Navistar, INTEGRATED SUPPLIER QUALITY REQUIREMENTS (ISQ-001-Qm)(2019) at 4.2.1 (as part of its global 8D approach to dealing with problems, "suppliers are expected to take ownership of the process, lead root cause investigations and report progress on a timely basis."). See also, Automated Dynamics, SUPPLIER HANDBOOK (2017) at 5.7 (requiring root cause analysis as part of its policies on "Corrective and Preventative Actions." For an overview of the root cause analysis process, see James J. Rooney, & Lee N. Vanden Heuvel, ROOT CAUSE ANALYSIS FOR BEGINNERS, 37 Qual. Prog. 45–53 (2004).

¹⁵⁷ The strategies chosen vary widely. Some impose consequences for a low score in a single quarter, others impose no consequences unless the violations continue for a specified number of quarters. See e.g., Littlefuse, SUPPLIER QUALITY MANUAL, at 15-16 (explaining how the buyer will react to A,B, and C scorecard grades depending on how many consecutive months they are earned); Kohler Engines, SUPPLIER QUALITY REQUIREMENTS, at 3 (setting out a variety of objective metrics and the ways that "[l]ow quality scores (based

problem is corrected, increasing oversight, demanding replacement, providing assistance, or terminating the relationship—and sometimes the strategy the supplier is expected to play in return before the buyer will return to full cooperation, like following a set of steps to identify the cause of the problem, implement remedial actions, and demonstrate that the problem has been solved.¹⁵⁸ By clearly and publicly revealing the ways that buyers will respond to particular types of problems, as well as by making clear the conditions that must be met for buyer cooperation to continue (like the supplier submitting a plan for ensuring that the problem does not occur again),¹⁵⁹ these provisions decrease the likelihood that a generally cooperative contracting relationship¹⁶⁰ will

on a rolling 12 month average) will affect the supplier's ability to do business with Kohler," depending on the type of component); JCI Manual, at 8.5.2 p 12 (presenting a chart listing the various type of supplier problems and production outcomes that will lead Johnson to impose level 1, level 2 and level 3 type "Management Quality Review," or in the case of the worst problems, a new business hold) Richard Menhorn, *NCR Supplier Scorecard Procedure* (2010), Document Number 497-0469929, at p 6 (setting out the consequences in terms of new business, new business holds, and required corrective action steps for different scorecard ratings). Milsco clearly specifies the supplier actions that can result in reduction or termination of buy. QUALITY, *supra* note __ at 1.3 (explaining that "[n]ew and Existing Suppliers may adversely hurt their selection for new or continuing business standing with . . . Two or more SCAR's issued within a monitoring period . . . Supplier 12 month rolling PPM average of 100 with a goal of 50 each month . . . Failure to meet score card objectives . . . Milsco line shut downs or material impacts to labor efficiency . . . Rejection on Safety critical parts/part failed or defective . . . Major Market Failure / recall / major warranty cost claims last 6 months . . . Parts' rejection within 90 days after production launch . . . Multiple reoccurrences of system failures within last 6 months . . . Lack of response to SQE Supplier (QIP) Quality Improvement Plan . . . Failure of the Technical Audit conducted by SQE"). The manual goes on to explain the consequences of a bad scorecard, noting that Milsco will impose these consequences whenever the metrics for doing so are met and will not exercise any discretion, stating that "[a]ll suppliers WILL be reviewed in part to their overall performance. To include PPM, delivery, cost innovations, response time and quality of documentation. Suppliers who do not meet targets for either 3 consecutive months or show a 4 month alternating spike will be placed on a developmental QIP process. (Quality Improvement Process). This will not be discretionary, but based purely on the performance of the supplier." *Id.* at 1.8.

¹⁵⁸ See e.g., Pirelli, *THE SUPPLIER HANDBOOK* (2014) at 8.2.6 (providing that when Pirelli makes a complaint to a supplier, the supplier "must comply with the steps set out in the Eight Disciplines (8d) Problem Solving . . . and provide evidence that . . . immediate measures have been deployed to resolve the real or potential impact of nonconformity . . . the cause of the defect/issue have been identified and corrective action has been taken . . . it can guarantee the non-conformity will not recur . . . it has measure the effectiveness of the corrective measures taken.")

¹⁵⁹ submit a plan].

¹⁶⁰ In addition to knowing the strategy one's contracting partner will adopt in response to one's own actions, cooperation is promoted when the payoff's to one's partner from cooperating or defecting are known as well. See Robert Gibbons and Rebecca Henderson [insert] In many procurement contracts, there are important situations where the supplier will have this information about the buyer-customer. These contracts (even those that are nominally long term contracts), see e.g., Contract between Deere and Stanadyne often include what are known as competition out clauses. These clause provide that when the buyer finds a supplier who can make the good either cheaper or better, he must disclose this to the incumbent supplier who then has a period of time, usually 60 days, to meet the price or submit a plan for meeting the quality. If the supplier cannot meet the competition the buyer is then allowed to terminate the agreement.

mistakenly devolve into a series of echoing defections when an undesirable outcome occurs.¹⁶¹

2. NETWORK GOVERNANCE

When the parties to a contract are part of a market in which market participants (or subsets of them¹⁶²) are connected to one another in such a way that information about bad behavior can become known through either throughout the market as a whole or a relevant subset of it (and the information is of a type that will change the way others will act towards the misbehaving party), multilateral reputation-based sanctions can be an important force in commercial relationships. This force is known as network governance.¹⁶³ Its effectiveness in general as well as how strongly it will affect the behavior of a particular firm or pair of firms will depend where in a network (that is, the pattern of ties between and among firms in a relevant market) the firm or firms are located, as well as the ways that each firm is connected to other firms and the ways these firms, in turn, are connected to other firms in the market.

Network governance will be a more powerful force to the extent that market participants other than the contracting parties, have better information about what a firm was supposed to do and/or what it actually did.¹⁶⁴ The fact that most managerial terms are standardized across a firm's suppliers and posted on the web for all to see, reduces the information transmission burden on the network ties whose existence gives multilateral reputation sanctions their power. When terms are both standardized across suppliers and widely known, all that has to be transmitted is information about what happened, as recipients will know or be able to easily find out whether this was

¹⁶¹ For example, the "purpose" Milsco's supplier handbook "is to define for our current and potential new suppliers Milsco Manufacturing's expectations and requirements that will sustain a long-term mutually beneficial relationship." Milsco, *QUALITY*, *supra* note __ at.

¹⁶² Some large buyers have created supplier associations and pay for all or some of their suppliers to come together on a regular basis to meet in person. By creating this group, buyers can more effectively tie their hands against contractual misconduct, because they know and the suppliers know that if the buyer misbehaves towards any one supplier this may quickly become known throughout the supply base, unnerving other suppliers and perhaps leading them to ask for or demand additional contractual protections. For an discussion of supplier associations as a hands tying device see Bernstein, *Beyond Relational Contracts*, *supra* note __.

¹⁶³ For an overview of network governance and the many roles it plays in procurement contracts in America's rust belt, see Bernstein, *Beyond Relational Contracts*, *supra* note __.

¹⁶⁴ In some relatively small closed networks with deep interpersonal connections among traders with strong and longstanding ties, like members of the New York Diamond Dealers club in the early 1990s, it may be enough for a wronged transactor to simply spread the word that in his view x wronged him, in order for other trasnactors to be wary of dealing with X.

conforming behavior or nonconforming behavior, making network governance a more powerful force than it would be if managerial terms varied contract to contract.¹⁶⁵

3. INTERORGANIZATIONAL PROCESS BASED TRUST

The role played by supplier handbooks, contracts, and other documents in identifying the “strategies” buyers will play in response to various outcomes and types of supplier behavior, together with the detail in these agreements and the adoption of the full panoply of managerial provisions described above, may also help to build inter-organizational process-based trust. Process-based trust arises from the existence “institutionalized processes or routines for fairly and reliably dealing with a partner organization.”¹⁶⁶ This type of trust has been shown to be important in buyer-supplier relationships in both the automotive¹⁶⁷ and electronics sectors.¹⁶⁸ It has been cited by American automotive suppliers as a key reason that they prefer dealing with Japanese car makers. As one automotive supplier executive noted, with American buyers “[t]he rules of the game are constantly changing. With Japanese companies we don’t seem to have the same problems because their policies and personnel are consistent and stable.”¹⁶⁹

The decision of many companies to publicly post their supplier manuals on their website and to incorporate them into contracts¹⁷⁰ can be understood as buyers attempting to more credibly bind themselves to follow the strategies they set out, and thereby build process based-trust over time. And, many of the sorts of supplier development efforts described above have also been found to contribute in a significant way to the creation of interorganizational trust.¹⁷¹ More broadly, this type of process based trust is also

¹⁶⁵ Insert footnote explaining that when all suppliers are governed by the same rules, this lightening of the information burden should make suppliers association an even more important contract governance device.

¹⁶⁶ Dyer and Chu, *Determinants of Trust*, *supra* note __ at 261.

¹⁶⁷ *Id* at __

¹⁶⁸ Zaheer et al., *supra* note __ .

¹⁶⁹ Dyer and Chu, *Determinants of Trust* *supra* note __ at 277.

¹⁷⁰ The public availability of supplier manuals and their announced applicability to all contracting relationships should largely remove the negative relational signal that might otherwise be sent were a firm to single out a particular supplier for such extensive monitoring, managing, and auditing. For a discussion of the potential relational costs that can result from a transactor asking for a more detailed agreement than is common in a particular setting or from requesting new or unusual terms, see Lisa Bernstein, *Social Norms and Default Rules Analysis*, 1 S. Cal. Interdisc. L.J. 59 (1993).

¹⁷¹ See Jeffrey H. Dyer and Winjin Chu, *The Determinants of Trust in Supplier Automaker Relationships in the US, Japan, and Korea*, 42 J. INT’L BUSINESS STUD. 10, 14 (2011) (“According to the suppliers we interviewed [and data from a survey of 453 suppliers] the buyers processes for providing regular assistance to suppliers (in many cases helping to fix buyers operational problems) were likely to influence the degree of trust in the buyer.”).

associated with the growth, over time of potentially valuable interpersonal trust, and may therefore be viewed as one of its supporting structures.¹⁷²

Finally, it is important to note that over time managerial provisions may also contribute to strengthening another type of trust, namely competence-based trust – that is, the belief that one’s counterparty has the “technical and managerial competence,”¹⁷³ to fulfil their obligations. In the procurement setting, this type of trust is initially created, in part, through the supplier qualification process – which includes the submission of documentation about the supplier’s operations, interviews with former and current customers, interviews with supplier employees, and plant visits – and is built over time through both the process of the supplier actually doing what is promised and the information gained as the parties’ employees interact in way that are encouraged or required by managerial provisions.¹⁷⁴ Such trust is crucial for buyers who outsource the production of hundreds of component parts, where defects in even small and inexpensive parts (like an automobile ignition switch) can lead to massive recalls.

IV. TOWARDS UNDERSTANDING THE IMPLICATIONS OF THE MANAGERIAL APPROACH

The rise of managerial contracting and the need for buyer and supplier employees to work together at so many levels of their enterprises suggests that the lawyers drafting these agreements would benefit from paying more attention to the internal management structures of both the buyer the supplier firms as well as to the incentives facing particular managers at different levels of both organizations who are responsible for the

¹⁷² This is very different from the scaffolding role ascribed to written contacts in complex contracting relationships involving innovation in Gillian K. Hadfield and Iva Bozovic, *Scaffolding: Using Formal Contracts to Support Informal Relations in Support of Innovation*, 2016 WISC. L. REV. 981 (attributing the formal contracts role in scaffolding the transactors’ relationship to the interpretation of terms provided by lawyers who intermediate the relationship whereas managerial terms are designed to be understood and interpreted by the line employees who must implement them).

¹⁷³ Mari Sako, *PRICES, QUALITY AND TRUST: INTERFIRM RELATIONS IN BRITAIN AND JAPAN* (Cambridge: 1992) at 37 (introducing the idea of competence-based trust and discussing its importance in buyer-supplier relationships in Britain and Japan)

¹⁷⁴ Together, managerial provisions may also support “learning by monitoring.” See, Susan Helper, John Paul MacDuffie and Charles Sabel, *Pragmatic Collaborations: Advancing Knowledge While Controlling Opportunism*, They identify benchmarking (some firms do this internally with their suppliers), look at the parallel groups piece, root cause analysis, just in time “once production begins. .the exchanges of information required to engage in benchmarking simultaneous engineering and error detection and correction also allow the collaborators to monitor one another’s activity closely enough to detect performance failures and deception before they lead to disastrous consequences. Ultimately, these information exchanges lead the actors to convergent understandings of the world they are exploring. Because it ties mutual assessments of reliability to joint explorations of capability. . .the system of collaboration as a whole [is called] learning by monitoring” at 466

administration of the contract.¹⁷⁵ Without this knowledge, the way that a contract is likely to work in practice and the value that it will create cannot be properly understood. The reason is simple: in practice, it is the combination of the internal incentives, organizational structures, and relational contracts created by an employee's own firm's intra-firm hierarchy and the interfirm obligations imposed by contract, relational trust, and the networks around the firms,¹⁷⁶ that will together determine the work-a-day actions taken by managers and employees—focusing on one (the contract) to the exclusion of the other(s) (intrafirm hierarchies of both parties and the relevant networks) is a major barrier to devising effective contract governance structures.¹⁷⁷

To better understand the importance of taking both intra and inter-firm constraints on behavior into account, consider the following examples of the ways that intrafirm

¹⁷⁵ Some buyers evidence an interest in their suppliers' internal management structure. At John Deere, for example, its Supplier Information Survey has a section that focuses on "Management Structure," and asks suppliers: "Do you have a documented organization structure?" and asks them to provide a copy of it if they do and to indicate whether they are willing to discuss organizational structure with Deere if they do not. Similarly, the Special Study for Corporate Counsel on Major Supply Agreements (2011-2012) at 7 suggests that when including project management provisions designating a project manager "responsible for the day-to-day cooperation," it is important that the "success or failure of the arrangement will play at least some part in their salary reviews."

¹⁷⁶ For examples, buyer firms that create supplier councils or associations, may be able to make far more credible commitments to either cooperative norms generally or to the particulars of managerial contracts, since if they go against these terms or norms it is likely to become quickly known through the supply base. For a description of the role supplier councils/ association can play in contract performance see Bernstein, *Beyond Relational Contracts*, supra note ___.

¹⁷⁷ There are studies in the management literature that provide some support for the idea that the internal governance of firms will affect the way they perform their contracts. See e.g., Akira Takeishi, *Bridging Inter- and Intra-Firm Boundaries: Management of Supplier Involvement in Automobile Product Development*, 22 J. STRATEGIC MGMT. 403, 419 (2001) (exploring the interaction between internal governance and the governance of outsourcing relationships in the Japanese auto industry and concluding that one of the three key determinants of "the quality of the component design developed jointly by an automaker and a supplier is the automaker's . . . problem solving pattern. . . with the supplier," which is "related to effective internal coordination inside the automakers organization . . . implying that effective external coordination needs effective internal coordination."); See also, Bas Hillebrand & Wim G. Biemens, *The Relationship Between Internal and External Cooperation: Literature Review and Propositions*, 56 J. BUS. RESEARCH 735 (2003) (noting that while few articles focused explicitly on the relationship between a firm's internal governance structures and the external governance structures it used with its suppliers and alliance partners, the existing did literature contain strong indications that the relationship might be important to value creation); Alexandra J Campbell, *Do Internal Departmental Relationships Influence Buyers' Expectations About External Supply Partnerships?* 13 J. BUS. & INDUSTRIAL MARKETING, 199 (1998) (drawing on a qualitative study of buyer-supplier relationships in the European flexible packaging industry to suggest that "buyers do attribute internal firm attitudes or norms to their external supply relationships," explaining that "[i]n firms characterized by cooperative inter-departmental interaction, buyers have a more cooperative orientation towards their supply relationships than do buyers in firms characterized by competitive inter-departmental interaction.")

governance structures might affect the way a contract is performed. For example, the management literature has found that the internal management structures of strategic alliance partners effects the success of the alliance. As one study revealed “[e]nterprises with a dedicated [alliance management] function achieved a 25% higher long-terms success rate with their alliances than those without such a function—and generated almost four times the market wealth whenever they announced the formation of a new alliance.”¹⁷⁸ As a consequence, without knowing the way each party manages its alliance, a lawyer would be hard pressed to understand how well the alliance might work and the amount of value it would be likely to create.¹⁷⁹ Interestingly, the definition of alliance used in this study – “any independently initiated interfirm link that involves exchange, sharing or co-development”¹⁸⁰—is a conceptual match with the structure of modern procurement contracts.

Similarly, a preliminary study found that where in the buyer firm’s internal network of employees the supplier’s best-connected contact in the buyer firm was—that is,

¹⁷⁸ Jeffrey H. Dyer, Prashant Kale & Habir Singh, *How to Make Strategic Alliances Work*, 42 SLOAN MGMT. Rev. 36, 38 (2001).

¹⁷⁹ The management literature ascribes the value created by a dedicated alliance function to four core functions: “acting as a focal point for learning,” keeping relevant stakeholders informed, “providing internal coordination and resource support. . .and monitoring and evaluating alliance performance.” Kale, et al, *Alliance Capability*, *supra note* __ at 752. Yet these structures may also create value by creating managers on each side of the alliance who will have to work together to solve a great many disagreements over the life of the alliance, and so are more likely to work problems out cooperatively, then managers at lower levels who do not see themselves as repeat dispute resolvers. This suggests that even in discrete deals, incentives can be improved by allocating various decision rights to pairs of transactors who will deal with similar situations repeatedly over the life of the contract. In addition, one leading study noted that “Through our interviews we learned that most alliance functions were attempting to capture and codify knowledge to more effectively manage each phase of the alliance life cycle,” which suggests that they may be creating alliance equivalents of supplier manuals, a subject worthy of further investigation.

More generally, the findings of this study suggest that in contracts where issues involving distributive disagreements are likely to arise on a semi-regular basis, it may be desirable to designate a manager in each firm to discuss them with her counterpart at the other firm on a regular basis. Knowing they will deal with such issues on an ongoing (repeat basis), locating the decision making with them rather than with managers who might perceive themselves as being faced with such difficulties on an ad hoc basis, makes patterns of cooperative outcomes more likely to arise and endure. This can be done through key personnel provision and clauses requiring disagreements or certain types of issues to be dealt with on regular basis. As for the end period problem, it is important to note that many supply agreements are structured using master supply agreements which are nonbinding, with binding commitments being formed through the issuance and acceptance of purchase orders. No clear end date. Structuring incentives at the employee level might also open the door for more effective mechanism design.

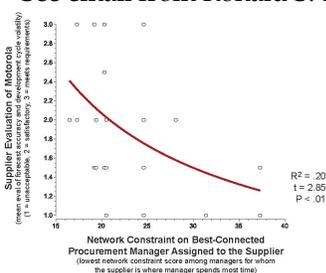
¹⁸⁰ The leading study defines alliance as “any independently initiated interfirm link that involves exchange, sharing or co-development,” a category that conceptually captures modern procurement contracts. Prashant Kale, Jeffrey H. Dyer and Habir Singh, *Alliance Capability, Stock Market Response, and Long Term Alliance Success: The Role of the Alliance Function*, 23 J. STRAT. MGMT. 747, 748 (2002)[hereinafter “*Alliance Capability*”].

whether her or she was well connected to employees in many other areas of the firm (that is, had an open network) or was instead siloed within one area (that is, had a relatively closed network) —had an effect on how the supplier assessed the buyers “forecast accuracy and development cycle volatility,”¹⁸¹ with more favorable ratings being given to the buyer’s manager where the buyer’s manager had an open network. This effect is important since studies from the automotive industry show that buyers who are more highly rated by their suppliers tend to be treated better than suppliers with lower ratings.

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Moreover, there is reason to think that information sharing and flexible problem solving between two firms will depend as much on the internal structure of incentives within each firm as it does on the contract between the firms. Although management scholars sometimes assume that “under conditions of [interfirm] trust, members of different partner organizations are likely to engage in extensive communication and

¹⁸¹ See email from Ronald S. Burt to author dated 10/11/19 (containing text and graph below).



Burt explains that the “data [reflected on the graph in the graph above] come from a consulting project by a colleague in our business school. The population is a division of supply chain managers and the unit of analysis is a manager. Each manager described his or her network of key connections for the work they did in the company. The data are used to sort managers on the horizontal axis, from managers embedded in a clique of interconnected contacts (to the right) to “network broker” managers with disconnected contacts in diverse parts of the company (to the left). The vertical axis is based on supplier ratings of how difficult it is to do business with the company. Individual managers are matched to the suppliers for whom each manager is most responsible so that supplier ratings can be linked to the work of individual managers. The company receives more positive ratings from suppliers who deal with managers who are network brokers. By network theory, network brokers are better informed about when and what the company is about to do. The company receives less positive ratings from suppliers who deal with managers embedded in a clique of interconnected contacts.”

¹⁸² Studies have shown that suppliers rating of buyers has an effect on the quality of the goods and services they provide. In the automotive area for example, an automakers “supplier relations rating on the working relations index . . . is highly correlated to the benefits that the OEM receives from its suppliers, including more investment in innovation and technology, lower pricing and better supplier support, all of which contribute to the OEMs operating profit and competitive strengths.” PR News Wire, *19th Annual Supplier Working Relations Study Indicated Auto OEM’s Slight Improvements Pale to Significantly Greater Industry Trends*, (June 17, 2009); see also Accenture, *SUPPLIER WORKING RELATIONS: UNLOCKING THE STRENGTH OF SUPPLIERS*, 8 (2012) (presenting graphs showing that the higher an OEM’s score on the Working Relations Index, the more willing the supplier is to both “invest in new technology in anticipation of future business,” and “share new technology without assurance of a purchase order.”)[add Deere and Caterpillar from the JW papers]

information sharing on an informal basis,"¹⁸³ in reality, the likelihood that this will happen will depend on the hierarchy and relational contracts within the firm whose employee is revealing information as well as the contract between the firms.

A manager of a supplier, might, for example, have information that could help solve a problem or improve a product or process if shared with a buyer. However, if revelation of the information might cause a problem, even if the likelihood of its doing so were remote, the manager may fear being second guessed by his/her superiors. Since on a work-a-day level the manager may reap little if any personal benefit from revealing the information, yet will bear substantially all of the cost if something goes wrong, in the absence of internal firm management practices that eliminate second guess risk, far too little information is likely to be exchanged by the parties. As a consequence, unless the firm employing the manager has a credible way to convince the him that he will not be punished if this happens, the manager is unlikely to reveal the information unless required to do so by contract,¹⁸⁴ even if there is enough trust between the contracting entities to make such information revelation desirable. Other contractual provisions that appear to give a buyer a right, like the right to enter a plant with no notice, can also be understood as removing the second guess risk from a supplier's employee who concludes that letting a buyer into a plant is likely to improve the contracting relationship.¹⁸⁵

¹⁸³ See Dries Faems, Maddy Janssens, Anoop Madhok and Bart Van Looy, *Towards an Integrative Perspective on Alliance Governance: Connecting Contract Design, Trust Dynamics, and Contract Application*, 51 ACADEMY OF MANAGEMENT J. (2008) 1053, 1055. Citing Uzzi (a setting with much smaller firms.... And Ring and Van de Ven 1994

¹⁸⁴ *Id.* at 1069 (presenting a case study of sequential alliances between two firms, the first resulting in failure, the second in success, that found more information sharing in the second that it attributed to the "presence of contractual obligation for information flows. . . [including] [p]lanning of joint review meeting in which results of technological experiments need to be exchanged," and there were more contractually specified joint tasks for the transactors employees to undertake and more "behavior monitoring mechanisms.")

¹⁸⁵ [this note may be removed] Conversely, the existence of second guess risk within a supplier firm may also create benefits for the stability of the contracting relationship by making some types of deliberate opportunism across firms less likely. Consider for example an upper manager of a supplier who wants to ship substandard goods on purpose. This would require him to convince a line foreman to produce substandard goods. That foreman, however, whose compensation, status within the firm, or future employment possibilities, may depend, or be perceived by him to depend on meeting quality standards, might fear being fired, demoted or otherwise sanctioned for overseeing a substandard production run. He might fear discipline from another senior manager who notices the low quality and disagrees with the first managers decision, or even by his own manager who on seeing the results of his decision comes to regret it and seeks to place blame elsewhere. Given this, it may not be so easy for an upper manager to convince the foreman to do his bidding – thereby creating a dynamic that might be thought of as an agency benefit. Similarly, if large scale hold-ups require the cooperation of many of the employees within a firm, they too may be harder to accomplish than they would if the party engaging in the hold-up were a one person enterprise. Fear of second guess risk if a hold-up goes wrong might deter participation in a plan to accomplish it, and a ring leader contemplating proposing such a plan to his co-worker, might fear not only second guess risk from his superiors, but also might be concerned that whether or not the plan goes forward, the employees he directly manages may trust his word less than they would have in the absence of a proposed opportunism thus impairing his future effectiveness as a manager. In sum, without

As a consequence, many key drafting decisions a lawyer must make, like specifying how much information revelation has to be contracted for, should be informed by an understanding the organizational incentives within his client's contracting partner. Recognizing the importance of drafting contracts in light of these two sets of constraints in tandem offers a reason for thinking more carefully about the wide variety of intra-firm management mechanisms (of which the WMS practices are but a small subset) that might yield insights into how to better coordinate activities across firms and construct systems of incentives that are more likely to have their desired effect. Additional examples abound.

Similarly, lawyers have overlooked the idea that there may be a dynamic relationship between the content of contracts and the structure of relational (or in many instances quite specific contracts) within firms. In face of very discretionary contracts, firms may respond by constraining their employees actions—limiting the amount of money a manager can commit the firm to pay, requiring home office approval for adjustments and the like. In contrast, this inflexibility cost (within the firm) may be easier to avoid when contracts give employees less discretion. How this process plays out is also an area worthy of future study.

Finally, it is important to note that essay has assumed that managerial contracts are not simply put in the drawer and ignored by the parties as purchase orders were in Macualy's day. Although preliminary interviews suggest they do influence the daily activities of firm, the way and the extent to which they do so remains an important open

understanding the organizational hierarchy in his client and the other party's firm, there is no way that a lawyer can understand how a particular contract will work.

question for future research.¹⁸⁶ Do firms actually follow their announced strategies?¹⁸⁷ Do they actually avail themselves of their monitoring rights or cut back as the relationship develops and the buyer comes to trust the integrity of the sellers manufacturing process?¹⁸⁸

In sum, there are reasons to believe these contracts matter, but exactly how remains an open question and there are not only any of a number of plausible answers from a theoretical perspective but there is also the possibility that the answer may not be the same for each type of managerial provision.

V. CONCLUSION

This essay has identified a shift in the structure of contracting relationships in industrial procurement from the highly informal relational contracts described by Stewart Macaulay to highly structured and organizationally complex managerial

¹⁸⁶ Identifying the managerial approach to contracts also raises many issues from the perspective of the management literature that require further investigation. First, it is not known if firms that use the WMS practices within their plants, also require adopt require their suppliers to implement the same practices in their plants as well. The answer to this question matters because if they do, then it is possible that some of the productivity gains that management scholars have attributed to the use of these practices within firms, may actually stem from the use of these practices across firms, or rather from gains of a firm's suppliers being required and sometimes helped to use them in their plants as well. Second, management scholars have long debated why, if the management practices associated with increased productivity are generally known, they are not quickly adopted by all firms. A variety of explanations for this have been proposed. The four most are that: "incumbent managers may have problems of perception—they do not know that they are behind. . . [they] may have problems of inspiration—they know they are behind, but they don't know what to do about it. . . [or] they have problems of motivation," Robert Gibbons and Rebecca Henderson, *Relational Contracts and Organizational Capabilities*, 23 *ORG. SCI.* 1350, 1350 or, and perhaps most relevant for understanding managerial contracts, that the effectiveness of many of these practices "rely on relational contracts . . . [that is] collaboration sustained by the shadow of the future as opposed to formal contracts enforced by courts." *id.* An alternative hypothesis is that these practices spread through procurement contracts. Large buyers not only require them of their suppliers, but in turn require them to impose substantially equivalent requirements on their suppliers and so on down the line through to raw materials. Together with the implementation assistance that, as discussed above, large buyers tend to provide free of charge to their tier one suppliers, the customer base of those adopting these practices may play a role in explaining the pattern of diffusion and non-diffusion.

¹⁸⁷ One supplier manager explained that her firm (the buyer) did not impose the chargeback plus fine when her suppliers did not deliver or time or quality fell below specification. Rather, she would simply request rework and after more than one problem a written plan for avoiding future problems. The fine, she explained was only imposed when she felt there was a problem inside of the supplier that needed to be fixed. Imposing the fine brought the problem to the attention of finance and upper management and thus triggered attention to it from the top down. Move to charge back

¹⁸⁸ John Deere, a firm with strict oversight and monitoring of its suppliers is known to reduce its oversight over time as the supplier begins to consistently produce goods to Deere's exacting standards. See also, Generac, *supra* note __ at p. 2 (noting that as the supplier goes through the steps in the supplier development program, there will come a time when "a supplier becomes well aligned and requires minimal guidance").

contracts used today.¹⁸⁹ As the tasks to be performed in modern outsourcing relationships shifted from mere production of specified products, to both production and supplier-involved or supplier-led innovation, and as quality expectations rose to a level where quality had to be dealt with on an iterative basis involving both the buyer and the supplier throughout the design and manufacturing process not merely through ex-post buyer inspection,¹⁹⁰ the need for buyer and supplier personnel to interact on a regular basis increased as did the need for them to share information (often in real-time) in order to achieve their desired ends. Consequently, contracts had to move from documents that focused primarily on the prevention of opportunism and the remedies available for material breach, to documents that devoted considerable attention to governing the contracting relationship while serving the core tasks of coordination, adaptation, and facilitating the type of information-sharing needed for innovation.¹⁹¹ As one electronics industry participant explained in a 1998 study, “It is necessary to get away from a ‘remedy-oriented’ contract which includes all contingencies. We need to focus on what can go right instead of what can go wrong.”¹⁹²

In many ways the rise of managerial contracting is a natural outgrowth of these changes – firms are adapting governance mechanisms that helped them coordinate and govern the relationships between their own employees when goods were produced in-house, to the task of governing work-a-day relationships among the employees of both firms now that they must perform tasks much as they would if they worked for a single entity. In addition, the information that buyers must share with their suppliers if they are to innovate on their behalf, is so extensive that it greatly increasing the costs of buyers switching to alternative suppliers,¹⁹³ thereby increasing the importance of solving problems rather than quickly terminating contracting relationships when problems arise.¹⁹⁴

¹⁸⁹ Managerial contracting too scaffolds the parties relationship, but does it not through legal concepts that enable lawyers to decode the meaning of contracts for their clients, but by talking directly to the managers and employees who will be tasked with executing these agreements. Drafting in ways that these employees can understand their obligation is important. In the past it was the job of legal to hand contracts off to operations, often by __. Led to risk they would interpret differently. CHECK EARLIER HADFILED NOTE AND CUT

¹⁹⁰ See e.g., NCR contract *supra* note __ at preamble (“ If there are any Product is now or hereafter supplied by supplier or any of its Affiliates to NCR . . . Such Products are deemed to be supplied under the terms and conditions of this Agreement whether or not they are specifically listed here.”)

¹⁹¹ See. (showing that the adoption of 16 out of the 18 managerial practice in the WMS was associated with improved innovation)

¹⁹² Zaheer et. al. *supra* note __ at 155.

¹⁹³ See Ronald J. Gilson, Charles F. Sabel and Robert E. Scott, *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, 109 COL. L. REV. 431, 486-89 (discussing the magnitude of switching costs).

¹⁹⁴ It is important to recognize that many procurement contracts are no-term contracts, that is, the master supply agreements that govern them do not actually commit the seller to sell or the buyer to buy a particular amount of the good. Rather, a contract is formed when the buyers send and the seller accepts a purchase order. Other agreements, labeled long term contracts, but in practice, buyers have very liberal rights to

More generally, recognizing that the rise of managerial contracting is, at least in part, a response to the changing tasks facing the buyer and the suppliers employees and managers on a work-a-day basis, suggests that lawyers should be looking not only to the practices explored in the WMS, but also to other management strategies used within firms to improve the operation of outsourcing agreements. It also suggests that in devising contract governance devices serious attention needs to be paid to the intrafirm micro-level incentives facing the employees and managers of both the buyer and the supplier, rather than only the contractual incentives for each firm to act a particular way towards its counterparty.¹⁹⁵

The task of designing contracts to govern work-a-day behavior and meet the evolving goals of these agreements will require lawyers to shift their perspective from contracts as promise to contracts as a framework for project management. It will also require further research into how managerial provision are actually applied in contracting relationships. As the outsourcing revolution surges ahead, the effective design of managerial contract provisions that can help buyer and supplier employees cooperate as if they were employed by a single entity, is likely to become and ever greater driver of the profitability of both buyer and supplier firms.

terminate for cause while paying no damages, or to terminate either for convenience (when pay a low level of reliance damages) or when another supplier can make the good cheaper or better and the incumbent supplier cannot match either the price or the quality or both. In this instance, the buyer is free to terminate under these so-called “competition out” clauses.

¹⁹⁵ The importance of these aspects of contracting relationships is not fully recognized by lawyers. For example, while This in turn suggests that relational contracts within the firm will effect contracts across firms.
