Oxford Handbooks Online

The Value of a Legally Astute Top Management Team: A Dynamic Capabilities Approach

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The Oxford Handbook of Dynamic Capabilities
Edited by David J. Teece and Sohvi Leih

Subject: Business and Management, Business Policy and Strategy, Organizational Theory and Behaviour
Online Publication Date: Mar 2016 DOI: 10.1093/oxfordhb/9780199678914.013.027

Abstract and Keywords

This article describes the construct of "legal astuteness" and explains why it is a valuable dynamic capability. It also examines the systems approach to law and strategy, which embeds the top management team within the firm's "ecosystem." The discussion begins with an overview of the dynamic capabilities approach to competitive advantage and proceeds by identifying the requirements of legal astuteness: a set of value-laden attitudes about the importance of law and ethical behavior to firm success; a proactive approach to management, regulation, and risk; context-specific knowledge of the law and the appropriate use of legal tools; and strategically astute counsel. The article then explains how legally astute top management teams can augment contracts with relational governance; practice strategic compliance management; enhance, combine, protect, and reconfigure tangible and intangible assets; and manage human resources more effectively. Finally, it outlines degrees of legal astuteness.

Keywords: legal astuteness, dynamic capability, systems approach, top management team, ecosystem, law, competitive advantage, strategic compliance management, human resources management

1 Introduction

This chapter presents the construct of "legal astuteness" (Bagley, 2008) and argues that it is a valuable dynamic capability (Teece et al., 1997; Teece, 2007). It also presents the systems approach to law and strategy (Bagley, 2010), which embeds the top management team (TMT) within the firm's "ecosystem" (Teece, 2011: 4, 6). Like "[t]he element of dynamic capabilities that involves shaping (and not just adapting to) the environment" (Teece, 2007: 1321), the systems approach "is entrepreneurial in nature" (Teece, 2007: 1321) and includes not only the competitive environment, the resources of the firm, its value proposition, and the activities in the value chain but also the regime of public law and the broader societal context within which firms operate.

The dynamic capabilities approach seeks to explain how certain firms build competitive advantage in "a Schumpeterian world of innovation-based competition, price/performance rivalry, increasing returns, and the 'creative destruction' [Schumpeter, 1934] of existing competencies (Teece et al., 1997: 509)." Teece disaggregates dynamic capabilities "into the capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets" (Teece, 2007: 1319). Dynamically capable firms have the ability "to learn and to adjust" (Teece, 2011: ix) and to sense, create, shape, and seize opportunities "while simultaneously [identifying and] managing competitive threats" (Teece, 2011: 4). Dynamic capabilities "also embrace the enterprise's capacity to shape the ecosystem it occupies" (Teece, 2007: 1320), including the ability to help shape the "rules of the game," the informal customs and laws governing the conduct of business (North, 1990: 3). They also include "the ability to develop new products and processes, and design and implement viable business models" (Teece, 2007: 1320).

Wernerfelt (1984) and Barney (1991) asserted that firm resources, be they physical capital, human capital, or organizational capital, have the potential of providing sustained competitive advantage if they are valuable, rare, and imperfectly imitable by competitors, and have no strategically equivalent substitutes. Under the resource-based view (RBV) of the firm, "a firm develops competitive advantage by not only acquiring but also developing, combining, and effectively deploying its physical, human, and organizational resources in ways that add unique value and are difficult for competitors to imitate" (Colbert, 2004: 343). Because "competences can provide competitive advantage and generate rents only if they are based on a collection of routines, skills, and complementary assets that are difficult to imitate" (Teece et al., 1997: 524), "that which is distinctive cannot be bought and sold short of buying the firm itself, or one or more of its subunits" (Teece et al., 1997: 518). As discussed in Section 3.3.1 below, it is increasingly difficult to identify significant sources of firm value that do not depend on legal rights for the capture of that value.

Teece et al. (1997: 518) postulated that "the competitive advantage of firms lies with its managerial and organizational process, shaped by its (specific) asset position, and the paths available to it." A firm's "managerial and organization process" includes the ways managers coordinate or integrate activity inside the firm, such as the process by which learning occurs and is disseminated and the capacity to reconfigure the firm's asset structure and to accomplish the necessary internal and external transformation (Teece et al., 1997: 518–521). Position comprises the “current specific endowments of technology, intellectual property, complementary assets, customer base, and its external relations with suppliers and complementors” (Teece et al., 1997: 518). Thus, it includes enforceable rights, such as contracts with customers, suppliers, and complementors; patents, copyrights, customer lists, and other tacit knowledge protectable as trade secrets; reputational assets, which can be impaired by compliance failures; and structural assets, such as distinctive corporate governance and partnership arrangements and the ethical and innovative culture of the firm. “Paths” are “the strategic alternatives available to the firm,” which are affected by “the presence or absence of increasing returns and attendant path dependencies” (Teece et al., 1997: 518).

While recognizing that “competitive advantage can flow *at a point in time* from the ownership of scarce but relevant and difficult-to-imitate assets, especially know-how,” Teece made it clear that “in fast-moving business environments open to global competition, and characterized by dispersion in the geographical and organizational sources of innovation and manufacturing, sustainable advantage … requires unique and difficult-to-replicate dynamic capabilities” (Teece, 2007: 1319).

2 Legal Astuteness

Bagley (2008) posited that a managerial capability she called “legal astuteness” is a valuable dynamic capability that may be a source of sustained competitive advantage. Legal astuteness requires (1) a set of value-laden attitudes about the importance of law and ethical behavior to firm success; (2) a proactive approach to management, regulation, and risk; (3) the ability to exercise informed judgment when managing the legal and business aspects of business; and (4) context-specific knowledge of the law and the appropriate use of legal tools (adapted from Bagley, 2008: 379). A high degree of legal astuteness also requires strategically astute lawyers (Bagley and Roellig, 2013).

2.1 *Value-Laden Attitudes*

Legally astute TMTs understand that “business decisions consist of continuous, interrelated economic and moral components” (Swanson, 1995: 51). When dealing with conflict, business leaders and their counsel “should keep trying to reframe issues and refine tactics until they are satisfied that the firm’s legitimate business objective of ‘winning’ in the marketplace is being advanced in an effective, legal, and above board manner" (Bagley and Roellig, 2014). In short, they acknowledge that "the moral aspects of choice" are the "final component of strategy" (Learned et al., 1969: 578).

The general counsel (GC) "is sometimes viewed as the 'ethics police person,' who catches inappropriate activities and institutes corrective actions to bring the rule-breaker into compliance with corporate governance standards. The GC is [usually] also a key member of the committees that examine the adequacy of internal controls and compliance with regulatory rules" (Jagolinzer et al., 2011: 1249). Or, as Victor Tettmar, the managing partner of Bond Pearce, put it, general counsel should be the "guardian of moral capital."

Bagley (2008) and Bagley and Roellig (2013) argue that every manager has a responsibility to ensure ethical behavior and compliance with law. "Creative compliance," that is, "complying with the letter of the law but defeating its spirit and purpose" (Terrell, 2009: 536), and taking advantage of unintended legal loopholes (Ostas, 2009: 487), can lead to unlawful behavior later down the road. Even worse, is actively deceiving regulators, which Volkswagen AG did when it added software to the diesel engines in roughly 11 million vehicles to generate false emissions test data (Ewing and Mouawad, 2015; Davenport and Hakim, 2016).

Especially when discussing values, "management communicates as much by what it doesn't do or say as by what it says and does. In fact, behavioral forms of communication are apt to have more credibility than spoken or written forms" (Drotning, 1974: 260). As Ben Heineman, former GC of General Electric (GE), explained: "The stirring call for performance with integrity at the large company meeting can be eroded by the cynical comment an executive makes at a smaller meeting, by the winks and nods that implicitly sanction improprieties, by personal actions (dishonesty, lack of candor) that contradicts company values" (Heineman, 2007: 102).

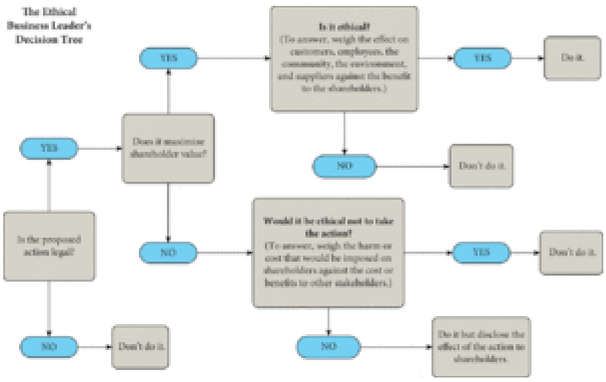

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Figure 1 The business leader's ethical decision tree.

The ethical business leader's decision tree (see Figure 1) is an example of a tool legally astute managers can use to assess not just the legality but also the ethics of their proposed actions (Bagley, 2003: 18–19). Managers are encouraged to ask first whether the action complies with the letter and spirit of the law. If it does, then the next inquiry is whether it would enhance shareholder value. Even if it would not, legally astute managers will go on to ask whether it would be unethical to refrain from acting. This reflects not only the importance of meeting the manager's and the firm's ethical standards but also the need to meet societal expectations, which directly affect a firm's license to operate, the application and interpretation of existing laws and regulations, and the adoption of new laws and regulations. If the management team elects to take an action that is not legally mandated and that does not enhance shareholder value, then it should disclose the reasons behind its decision to shareholders so they can take them into account when casting their votes for the board of directors at the next election. This transparency prevents management from using its professed concern for other constituencies or broad societal welfare to mask poor performance (Bagley and Page, 1999).

2.2 *Proactive Approach*

Legally astute TMTs recognize that "[b]usiness corporations do not have legal problems. They have business problems where legal considerations may be more or less important, depending on the specific circumstances" (Clinard and Yeager, 1980: 20). Taking a proactive approach to legal and business issues is a routine that fosters threat and opportunity identification, learning, and experimentation, key processes in dynamic environments (Teece et al., 1997; Teece, 2007). For example, Alberto-Aragon and Sharma (2003: 73) posit that a proactive strategy for reducing pollution and addressing other environmental matters that "anticipate[s] future regulations and social trends and design[s] or alter[s] operations, processes, and products to prevent (rather than merely ameliorate) negative environmental impacts" is a dynamic capability that can offer competitive advantage. GE's ecomagination campaign, designed to reduce its own emissions and to promote the development and sale of energy-efficient products, reduced expenses by more than $100 million and increased the revenues generated by its environmentally friendly products, such as hybrid locomotives and more efficient jet engines (LaMonica, 2007).

Managers who view the law purely as a constraint, something to comply with and react to rather than to use proactively, will miss opportunities to use the law and the legal system to sense and seize opportunities and thereby increase the firm's realizable value. They will also lose the benefits provided by strategically astute lawyers (Bagley and Roellig, 2013), who can help drive business success.

2.3 *Exercise of Informed Judgment*

Legal astuteness requires the ability to exercise informed judgment:

> Law is not an exact science—legal rules are not applied formulaically. Seemingly minor changes in facts can result in dramatically different legal outcomes. Often, there is no clear precedent to serve as a guide. Dealing effectively with the uncertainties inherent in many decisions having legal aspects require the exercise of informed judgment. Legally astute managers—even those with formal legal training—do not purport to advise themselves on legal matters of importance. They appreciate the importance of selecting a true counselor at law who combines knowledge of the black-letter law with judgment and wisdom. As Kronman (1995) explained, wisdom is more than technical skill; it is the capacity to offer deliberative advice—that is, to go beyond merely supplying whatever means are needed to achieve the client's goals and to deliberate with the client about the wisdom of the client's ends (Kronman, 1995: 132–133). Certain courses of action may be legal but not wise.
>
> (Bagley, 2008: 381.)

2.4 Context-Specific Knowledge of the Law and the Application of Legal Tools

The non-lawyers on the TMT need context-specific knowledge of the law and the application of legal tools, that is, "legal literacy" (Bagley, 2008: 382–383), so they can communicate in a meaningful way with counsel. Thus, legal literacy is a "managerial and organization process" by which learning occurs and is disseminated (Teece et al., 1997: 518–521). It depends on joint contributions to the understanding of complex problems made possible by common modes of communication and coordinated search procedures (Teece et al., 1997: 518–521). Working together on a regular basis fosters trust between the managers and the lawyers. Trust is a firm-specific relationship (Barney and Hansen, 1994), which cannot be readily recreated when a lawyer or a manager leaves to join another firm.

Having the managers and lawyers work together as a team enhances the firm's "ability to sense the need to reconfigure the firm's asset structure and to accomplish the necessary internal and external transformation" (Teece et al., 1997: 520). For example, in what Warren Buffett called "the most successful managerial performance in bankruptcy I've ever seen" (WarrenBuffett.com, 2014), USG Corporation, manufacturer of Sheetrock®

wall board and other building materials, successfully shed its asbestos liability pursuant to an orchestrated strategy that combined (1) filing for bankruptcy under Chapter 11 so it could obtain a “channelling injunction,” whereby the plaintiffs suing for asbestos-related disease would be required to seek redress solely from a dedicated trust funded by USG and approved by 75 percent of the claimants; (2) lobbying for federal legislation to create a multi-firm fund for the payment of asbestos personal injury claims in accordance with accepted medical standards for determining the existence and severity of asbestos-related disease; (3) litigating dubious claims; (4) a human resource strategy that valued both factory workers and up-and-coming managers; (5) transparency with both investors and employees; (6) a reputation for reliability and honest dealing with suppliers, customers, and employees; and (7) the ability to shift resources from primarily manufacturing Sheetrock® and other building materials to distributing other firms’ products as well (Bagley and Sherman, 2007a, 2007b, 2007c). USG emerged from bankruptcy five years after filing with a channelling injunction in effect pursuant to a reorganization plan that was approved by 98 percent of the asbestos claimants and a shareholder committee led by Warren Buffett, whose holding company Berkshire Hathaway owned about 15 percent of USG’s stock and back-stopped a $1 billion rights offering, with all debts paid in full with default interest, shareholder equity intact, and more than a 50 percent increase in revenues. Although USG CEO Bill Foote conducted this “orchestration” (Teece, 2012: 1397) and played a critical role lobbying for changes in the law, USG’s success would not have been possible but for his own personal knowledge of law and legal tools, and his close relationship with GC Stan Ferguson and other in-house lawyers along with the outside lawyers who helped litigate the asbestos claims and advised on the bankruptcy proceedings. It also would not have been possible absent USG’s ability to restructure its business to include counter-cyclical lines, such as distribution, and to grow the company through acquisitions.

2.5 *Strategically Astute Counsel*

The GC (or the chief legal officers (CLOs)) plays a “multiplicity of roles,” including manager of the legal department, legal advisor and educator, negotiator, crisis manager, and strategic planner (Duggin, 2007). They are “the ‘Swiss army knife’ of the legal profession” (Simmons, 2009: 146). Legally astute managers acknowledge the “right and responsibility [of inside counsel] to insist upon early legal involvement in major transactions” (Chayes and Chayes, 1985: 281). They call on their lawyers to play an active role in formulating the corporation’s strategy as a whole rather than just bringing them in to serve as technical consultants after a legal problem has arisen or the management team has already decided what to do (Bagley, 2008).

As Bagley and Roellig (2014) explain, “the later a lawyer is brought into the planning of a transaction, the more likely it is that the lawyer will have to say ‘no.’ Anticipating this, business managers may provide counsel with a skewed set of facts in hopes of improving the likelihood of receiving the go-ahead.” To avoid this dynamic and promote not only compliant corporate behavior but also value creation and capture, GC should act as strategic partners and encourage managers to take an active role in legal matters from the outset, that is, to be legally astute (Bagley and Roellig, 2013).

Nelson and Nielsen (2000) divided lawyers into three categories: cop, counsel, and entrepreneur. A “cop” is primarily concerned with “policing the conduct” of “business clients”; cops “interact with business people almost exclusively through legal gatekeeping functions, such as approving contracts, imposing and implementing compliance programs, and responding to legal questions” (2000: 463). “Counsel” not only give advice on the letter of the law but also more broadly advise on the potential, ethical, and reputational effects of a proposed course of action (2000: 464). The “entrepreneur” is a lawyer who “evolve[s] according to the needs of business” and views law as a source of profits to be leveraged in the corporation’s business strategy (2000: 466). They found that roughly 30 percent of the respondents in their survey of GC characterized themselves as entrepreneurs. About 25 percent were members of the TMT.

According to a 2012 KPMG survey of 320 GC, “The role of general counsel is moving from one of a ‘fire-fighting’ and reacting to events to being more strategic and proactively anticipating risks at an earlier stage” (KPMG, 2012: 10). There is the need to “see around corners” (Bagley and Roellig, 2014). Lawyers can do more than help firms anticipate and manage risk, however (Schwarcz, 2007). Business lawyers organize and reorganize firms; structure joint ventures, licensing arrangements, and other strategic alliances; practice preventative law; protect intellectual property; and handle regulatory matters (Dent, 2009).

The lawyers have to earn the trust and respect of the non-lawyers on the TMT to get a seat at the table from the outset (Bagley and Roellig, 2013). Directors “expect their CLO to be commercially aware and to combine this awareness with their legal knowledge and experience” (KPMG, 2012: 53). The firm’s lawyers must understand the firm’s value proposition, resources, industry, customers, business plan, and overall strategy. In short, the lawyers must be strategically astute (Bagley and Roellig, 2013). This requires tacit and firm-specific knowledge that often is not readily discernible or replicable by rivals.

Legal advice needs to be business oriented and tailored to the needs of each firm (Bagley, Roellig, and Massameno, forthcoming in 2016). Both internal and external counsel must be able to translate legal cases, regulations, briefs, memoranda, and jargon into understandable business terms, concepts, and communications (Bagley and Roellig, 2013). As one company president put it, “The GC should make us aware of what we should be doing and tell us this in a straightforward manner, not in complex legal language” (KPMG, 2012: 10).

When David Andrews was the senior vice president of legal affairs at PepsiCo, he stressed to his lawyers the importance of getting “close to the client” by working hand-in-hand with the managers of the business units (Bagley, 2005). Al Spies, the chief financial officer of US West, used to say: “I have no use for lawyers who talk in the third person. This is not about what *you* can do; this is about what *we* can do” (quoted in Bagley and Roellig, 2013: 53). Indra Nooyi, PepsiCo’s president and chief financial officer then its CEO, encouraged the PepsiCo lawyers to use both their legal expertise and their business judgment when working with managers, stating: “We can’t afford this separation of church and state” (quoted in Bagley, 2005: 227). She called on the lawyers to speak up if a manager proposed a business deal that did not make good business sense, instead of just focusing on preparing the perfect legal documentation for a flawed deal.

Although there are many benefits of involving in-house counsel at an early stage, there is always the danger that GC may become overly susceptible to forces that decrease independence, “especially when the question of legality is tinged in shades of gray as opposed to black and white” (DeMott, 2005: 968; Daly, 1997). As Bagley and Roellig (2014) explain:

> One of the most challenging roles of a general counsel is to have the courage and foresight to respond to the assertion, “Everyone else does it this way,” with “But we don’t,” then to move the dialogue to a discussion of how the firm might otherwise accomplish the business objective with less risk. In fact, every business leader has an obligation to ensure that the enterprise does not make irrational business decisions (including breaking the law) and should appropriately escalate any decision that falls within this area.

GC should be a trusted counselor (Linowitz and Mayer, 1994: 4), not a hired gun (Bagley and Roellig, 2014). Strategically astute lawyers never lose sight of the fact that they are members of a profession that has at its core an obligation to uphold the law. As Dan Cooperman, Stanford Law School Professor and former GC at Oracle and Apple, put it: “There is a professional duty not to be complicit in a criminal act, so if you believe that the corporation is violating the law, you really have no choice but to resign” (quoted in Lowe, 2012: 15).

Lack of objectivity may cause a corporation to assume unacceptable legal and business risks (Langevoort, 2012), as arguably happened at Arthur Andersen, Computer Associates, Countrywide Mortgage, Enron, Lehman Brothers, Tyco, and Volkswagen. In firms in which the GC reports to the CEO, Bagley and Roellig (2014) recommend that the CEO be required to share with the board (or a committee thereof) in advance of any decisions around the hiring, compensation, and termination of the GC. The GC should also have direct access to the board and routinely meet separately with the board (or a committee of the board) without the CEO or CFO present (Bagley and Roellig, 2014).

In addition, when the GC is a member of the TMT and an active participant in the formulation and execution of strategy, it may be necessary to appoint an independent chief compliance officer (CCO) or chief risk officer (CRO) who vets all courses of action to ensure legal and regulatory compliance, especially in highly regulated industries (Bagley and Roellig, 2014). The CCO or CRO might report to the CLO for routine matters, but he or she should have direct access to and a reporting relationship with the audit committee, as well (Bagley and Roellig, 2014). For example, at MassMutual Financial Group, the CCO reports “functionally” to the chair of the audit committee, with administrative and informational (as defined by resolution) “dotted-line” reporting to the GC (Bagley and Roellig, 2014). In addition, Bagley and Roellig (2013) recommend that the audit committee be involved in the selection, objectives, appraisal, and compensation of the CCO/CRO, with advice of a non-binding nature from the CEO or GC, and, therefore, determine his or her performance and prospects.

3 The Value of Legal Astuteness

Because “the locus of world-class research/productive capability might lie external to the enterprise,” firms may need to outsource at least aspects of their R&D to compete effectively (Pisano et al., 1988: 202; Teece, 2007: 1331). Legally astute TMTs can sense and shape opportunities by using a variety of legal structures to engage in R&D activities with others, such as university researchers, licensors, and joint venture partners. Rights of first refusal and co-investment and information rights give firms an early peek at the discoveries and progress of others. Inventions and customer lists and other data may be protectable as trade secrets. Discerning, anticipating, and exploring customer needs requires adherence with the applicable laws and regulations governing privacy protection.

Legally astute managers can seize opportunities by (1) negotiating appropriate contracts and promoting relational governance; (2) using legal tools to craft business models and make appropriate boundary choices; and (3) practicing strategic compliance management. They can enhance, combine, protect, and reconfigure intangible and tangible assets (Teece, 2007) by (1) using property law, including intellectual property protections, to secure the firm's ability to preclude others from appropriating its assets and to leverage assets; (2) more effectively managing human resources; (3) creating options and overcoming risk/loss aversion and overconfidence bias; (4) reducing the risks of non-compliance and enhancing the ability to convert regulatory constraints into opportunities by practicing strategic compliance management; and (5) shaping the "rules of the game."

3.1 Sensing and Shaping Opportunities

"To identify and shape opportunities, enterprises must constantly scan, search, and explore across technologies and markets, both 'local' and 'distant'" (Teece, 2007: 1324; Nelson and Winter, 1982). Sensing "involves investment in research activity and the probing and reprobing of customer needs and technological possibilities" as well as "understanding latent demand, the structural evolution of industries and markets, and likely supplier and competitor responses" (Teece, 2007: 1324). "To the extent that business enterprises can open up technological opportunities (through engaging in R&D and through tapping into the research output of others) while simultaneously learning about customer needs, they have a broad menu of commercialization opportunities" (Teece, 2007: 1322). Research and development, which is key to success in high velocity, Red Queen environments (Teece, 2011: 134, n. 28), is "carried out in a virtual Cambrian explosion of organizational forms" (Gilson, 2010: 887).

Consider today's highly competitive global pharmaceuticals industry. Since 2003, private pharmaceutical firms have increasingly focused on later-stage clinical trials and product development, reducing their investment in discovery activities, such as target identification and validity (Rai et al., 2008). Promoting the movement of medical discoveries from the laboratory to the patient, from "bench to bedside" (Gaspar et al., 2012), requires both identification of potentially promising technologies, compounds, and biologics (sensing) as well as the ability to commercialize them (seizing). Complex licensing and technology transfer arrangements are often necessary to bridge the so-called "Valley of Death" that separates "upstream research on promising genes, proteins, and biological pathways" by academic researchers funded by the government from "downstream drug candidates" that outside firms are willing to fund in hopes of commercializing the academic discoveries (Rai et al., 2008). Managers of pharmaceutical firms and their counsel can work with research universities and their counsel to craft pharmaceutical public–private partnerships (PPPs) that, coupled with relational governance, align incentives, protect and allocate intellectual property rights, and transfer tacit knowledge, thereby converting a bright idea in the lab into a blockbuster compound or biologic (Bagley and Tvarnø, 2014). Success requires "cross-functional R&D teams, new product development routines, quality control routines, and technology transfer and/or knowledge transfer routines, and certain performance measurement systems" of the sort identified by Eisenhardt and Martin (2000). Alliance arrangements facilitate active learning and the upgrading of relevant skills (Branzei and Vertinsky, 2006), thereby enhancing the absorptive capacity necessary for the identification and control of the "'bottleneck assets' or 'choke points' in the value chain from invention through to market" (Teece, 2007: 1331).

Rights of first refusal and co-investment rights give firms an early look at the discoveries and progress of others. Information rights give venture capitalists the ability to monitor product development and financial performance (Bagley and Dauchy, 2011). Discoveries and customer lists and other data may be protectable as trade secrets.

The law imposes "constraints on the rules by which competitive forces will play out. These constraints are imposed by regulators, standard-setting bodies, laws, social mores, and business ethics. The shape of the 'rules of the game' is thus the result of co-evolution and complex interaction between what might be thought of as (business) ecosystem participants." For example, anticipating and exploring customer needs requires adherence to the applicable laws and regulations governing privacy protection, which are particularly strict in Europe (Bagley, 2015a).

Legal advice is a prediction of what a judge or jury will do in a future case (Holmes, 1897) and should reflect not only the law but also ethical, political, and societal considerations (American Bar Association, 2003). This inherent uncertainty requires "entrepreneurs/managers [to] … make informed conjectures about the path ahead" (Teece, 2007: 1323). GE's failed attempt to acquire Honeywell resulted in part from its failure to accurately predict and counter resistance from the European Commission (EC) (Bagley, 2015a). Similarly, Comcast underestimated opposition to its proposed merger with Time Warner Cable, which only intensified when Comcast and other internet providers proposed creating "fast lanes" for certain content providers, including those willing to pay for faster internet speeds (Ramachandran, 2015). Comcast's history of abysmal customer relations certainly did not help (Pfeffer, 2015). The ultimate result was not only a failed acquisition but also the adoption by the Federal Trade Commission of strict new rules designed to ensure "net neutrality," an outcome one media expert characterized as "the worst of all possible worlds, a less attractive regulatory regime and no benefits in terms of a closed transaction" (Flint, 2015).

3.2 *Seizing Opportunities*

As Teece explains (2007 1326), "Once a new (technological or market) opportunity is sensed, it must be addressed through new products, processes, or services. This almost always requires investments in development and commercialization activity. Multiple (competing) investment paths are possible, at least early on.” The law offers a variety of legal tools to facilitate the seizing of opportunities. In addition, legally astute managers can actively seek to change the law to promote the capture of value.

3.2.1 Contracts and Relational Governance

In response to exchange hazards, particularly those associated with specialized asset investments, uncertainty, and difficult performance measurement, “managers may craft complex contracts that specify processes for resolving unforeseeable outcomes or define remedies for foreseeable contingencies” (Poppo and Zenger, 2002: 707). The law makes it possible for parties to create their own “private law” to govern their dealings and will enforce these rules as long as they do not conflict with fundamental public policies embodied in the public rules.

Legally astute TMTs can use formal contracts as complements to relational governance to reduce transaction costs (Williamson, 1975) and strengthen relationships. Managers who are highly skilled in managing contractual forms of governance, such as complete contingent claims contracts that specify the economic costs that will be imposed on parties engaging in opportunistic behavior will have a competitive advantage over those who must use more costly immediate market forces of governance (such as equity joint ventures) or hierarchical forms of governance to protect against exchange vulnerabilities, such as adverse selection, moral hazard, and hold-up (Barney and Hansen, 1994). As Bozovic and Hadfield (2015: 2) explain:

“formal contracting—meaning the use of formal documents together with the services of an institution of formal contract reasoning—serves to coordinate beliefs about what constitutes a breach of a highly ambiguous set of obligations. This coordination supports implementation of strategies that induce compliance— despite the presence of substantial ambiguity ex ante at the time of contracting— with what is fundamentally still a relational contract.

Although some contend that formal contracts signal distrust of the other party and thereby encourage opportunistic behavior (Macaulay, 1963: 64; Ghoshal and Moran, 1996: 24, 27), North and Weingast (1989: 808) posit that contracts and other institutional assets “do not substitute for reputation-building and associated punishment strategies, but complement them.” The values and agreed-upon processes found in social relationships may minimize transaction costs as compared with formal contracts (Dyer, 1997; Dyer and Singh, 1998). Negotiating a contract can help the parties get to know each other better, clarify their objectives and expectations, and thereby strengthen their relationship. It is important for managers and their lawyers to ensure that the process of negotiating a contract does not interfere with the social norms against opportunistic behavior and reneging (Bagley, 2008) or generate mistrust or ill will (Mnookin et al., 2000; Ertel, 2004). Bagley and Tvarnø (2014) argue that pharmaceutical PPP agreements that couple long-form contracting with relational governance and aligned incentives can shift the parties' outcome from a prisoners' dilemma Nash equilibrium to the Pareto Optimal Frontier.

Based on data from outsourcing relationships in information services during the early 1990s, Poppo and Zenger (2002) found that relational governance and formal contracts do indeed complement each other. Their research revealed that relational governance and contract customization both directly and indirectly increased exchange performance as measured by satisfaction with the cost, quality, and responsiveness of the outsourced service. "The presence of clearly articulated contractual terms, remedies, and processes of dispute resolution as well as relational norms of flexibility, solidarity, bilateralism, and continuance may inspire confidence to cooperate in interorganizational exchanges" (Poppo and Zenger, 2002: 712). This makes sense given the difficulty of providing for all contingencies in a written contract for a strategic alliance (Dent, 2009: 290–292). This is also consistent with one lawyer's statement that he was "sick of being told, 'we can trust old Max' when the problem is not one of honesty but one of reaching an agreement that both sides understand." (Macaulay, 1963: 58–59). Poppo and Zenger further found that increases in the level of relational governance were associated with greater levels of contractual complexity and that increases in the level of contractual complexity were associated with greater levels of relational governance (2002: 721).

In contrast, poorly structured contracts can destroy value. In a four-page license agreement with Microsoft Corporation, signed by John Scully and Bill Gates in 1985, Apple Computer effectively gave away its rights to many aspects of the Apple Macintosh graphical user interface in exchange for Microsoft's agreement to create a version of Office that would run on the Macintosh computer. When Microsoft released Windows 2.03, which more closely resembled the "look and feel" of the Macintosh graphical user interface (GUI) than Windows 1.0, Apple sued Microsoft, claiming that it had violated Apple's copyrights on the Mac GUI (Apple Computer, 1989a). Microsoft asserted that the 1985 agreement entitled it to use all of the elements of the Mac GUI embodied in Windows 1.0 in all future versions of its operating system in whatever combination it chose (Apple Computer, 1989b). The court rejected Apple's claim that the 1985 agreement was only "a license of the interface of Windows Version 1.0 as a whole, not a license of broken out 'elements' which Microsoft could use to create a different interface more similar to that of the Macintosh," reasoning that "[h]ad it been the parties' intent to limit the license to the Windows 1.0 interface, they would have known how to say so" (Apple Computer, 1989b: 1430–1432). Of the 189 aspects of the Mac GUI that Apple claimed Microsoft had infringed, the court concluded that 179 were covered by the 1985 agreement. Aside from Apple's use of a trash can for deleted files, the court ultimately concluded that none of the remaining aspects of the Mac GUI was protectable under the copyright laws (Apple Computer, 1992: 1041).

3.2.2 Legal Tools to Craft Business Models and Make Appropriate Boundary Choices

The management team constantly needs to ferret out information and to experiment then to feed the results into its decisions regarding the acquisition, development, deployment, and abandonment of resources to craft and recraft its value proposition and define (and redefine) the activities in its value chain, that is, to develop and adjust its business model. As Chesbrough and Rosenbloom (2002: 533–534) explain, the "function of a business model is to 'articulate' the value proposition, select the appropriate technologies and features, identify targeted market segments, define the structure of the value chain, and estimate the cost structure and profit potential" (Teece, 2007: 1329). A firm's capacity "to create, adjust, hone, and, if necessary, replace business models is foundational to dynamic capabilities" (Teece, 2007: 1330).

"[T]he invention and implementation of business models and associated enterprise boundary choices involve issues as fundamental to business success as the development and adoption of the physical technologies themselves. Business models implicate processes and incentives; their alignment with the physical technology is a much overlooked component of strategic management" (Teece, 2007: 1327).

For example, although Apple Inc. has continued to maintain proprietary integrated software and hardware for its computers, it greatly increased the appeal of its iPhone and iPads by making it easy for independent software developers to write applications that will run on the Apple iOS. Apple tests the apps for quality control purposes but abandoned its earlier model of keeping everything in-house except for certain programs, like Microsoft's Office, that had such strong network effects they made Apple's own suite of word processing, spreadsheet, and presentation software uncompetitive, at least for commercial users.

In contrast, Research in Motion (RIM), the inventor of the first widely commercialized smartphone, the BlackBerry, "seemed clueless about what consumers want" (Surowiecki, 2012: 38). It went from being "one of the most acclaimed technology companies in the world" with a 44 percent share of the smartphone market in 2009 to just 10 percent in 2011 (Surowiecki, 2012: 38). "RIM's product line became bewilderingly large, with inscrutable model names." In addition, BlackBerry's closed system, which ran on its own network, left RIM "ill equipped for a world in which phones and tablets are platforms for the whole app ecosystem" and in which its customers shifted from the managers in firms'

IT departments to consumer/employees encouraged by their employers to “Bring Your Own Device” (Surowiecki, 2012: 38).

Transaction cost economics (TCE) focuses on the boundaries of the firm—the decision of which transactions should be vertically integrated into the firm and subjected to the firm’s governance arrangements and which should be governed by interorganizational contracts. The literature on transactions costs emphasizes that opportunism may cause parties who have entered into an agreed-upon exchange to break their promises. According to Williamson (1985: 48–49), “Rather than reply to opportunism in kind, the wise [bargaining party] is one who seeks both to give and receive ‘credible commitments.’ Incentives may be realized and/or superior governance structures within which to organize transactions may be devised.”

In response to exchange hazards, particularly those associated with uncertainty, specialized asset investments, and difficult performance measurement, “managers may craft complex contracts that define remedies for foreseeable contingencies or specify processes for resolving unforeseeable outcomes. When such contracts are too costly to craft and enforce, managers may choose to vertically integrate” (Poppo and Zenger, 2002: 707). Thus, the ideal structure is the one that best addresses such exchange hazards and other legal liabilities. For example, exposure to liability stemming from employees’ on-the-job exposure to hazardous materials made firms more likely to adopt non-vertically integrated production systems (Barney et al., 1992). Lawyers can create value by serving as “transaction cost engineers” (Gilson, 1984: 255) and “enterprise architects” (Dent, 2009: 289–293).

For example, the successful commercialization of university inventions is “non-trivial” (Buenstorf and Geissler, 2012: 482). It requires not only methods for transferring tacit knowledge from university researchers to for-profit firms, such as by utilizing mixed R&D teams, but also incentives for both the research scientists and the universities (Bagley and Tvarnø, 2015). As the EC put it: “Cooperation between the worlds of science and the world of business must be enhanced, obstacles removed and incentives put in place” (EC, 2010). “Commercialization is complicated by uncertainty stemming from the early-stage character of most university inventions, information asymmetry between inventor and potential licensee, and also the non-codified nature of important elements of the knowledge base underlying the traded technology” (Buenstorf and Geissler, 2012: 482).

3.2.3 Practicing Strategic Compliance Management

A firm’s ability to seize opportunities is directly affected by its managers’ compliance with applicable law. As discussed in Section 3.3.4 below, the law can convert an otherwise valuable opportunity into a liability if legal requirements are not met. For example, Kodak had to abandon its instant picture business after a court ruled that Kodak had violated Polaroid's patents on instant film and cameras (Ingrassia and Hirsch, 1990).

3.3 *Enhancing, Combining, Protecting, and Reconfiguring Intangible and Tangible Assets*

A key dynamic capability is the ability to enhance, combine, protect, and reconfigure the business enterprise's intangible and tangible assets (Teece, 2007) and to accomplish the necessary internal and external transformation (Teece et al., 1997: 518–521). Like the failure to implement the correct corporate governance practices (Barney et al., 2001), failure to implement appropriate legal measures can prevent firms from fully realizing the value of the resources they control or seek to obtain. The law also offers ways for firms to reconfigure their resources by creating options to acquire and abandon assets and to defer decisions until more information becomes available. It also can help managers avoid both overconfidence and loss/risk aversion biases.

3.3.1 Protecting and Leveraging the Value of Property

The value of actively managing the legal aspects of business comes in part from the ability to protect property, including knowledge assets, such as inventions, capabilities, and business processes. Clearly defined property rights represented by recorded deeds of real property, security interests in goods, or patents and other IP (intellectual property) rights convert "dead capital" into readily tradable assets that can generate income or serve as collateral for loans (DeSoto, 2000: 6).

Law facilitates the marshaling and redeployment of financial and physical capital by providing limited liability to investors, offering fresh starts under the bankruptcy laws, and promoting transparency in the capital markets under the federal and state securities laws (Bagley, 2015a). Neither USG Corporation nor Texaco would have been able to preserve the firm's going concern value for its shareholders without the breathing room and restructuring options provided by the bankruptcy laws. Because both firms were transparent in their dealings with investors and complied with the applicable securities laws, their bankruptcy filings did not trigger even one shareholder lawsuit. In contrast, fraudulent financial reporting by Enron and WorldCom destroyed both firms (McBarnet, 2006).

Corporate statutes and judicial decisions govern the ability of a board to adopt and use anti-takeover devices to protect a strategic alliance and block a hostile takeover, even if it is favored by the shareholders (Bagley, 2015a: 627–630). For example, the board of directors of Time Inc. was able to preserve the Time culture and its "journalistic integrity" and to defend its decision to form a strategic alliance with Warner Brothers by implementing a shareholders rights plan (commonly referred to as a "poison pill") that precluded a hostile takeover by Paramount Communications at an arguably higher price (Bagley, 2015a: 623–624).

Knowledge assets can determine the company's ability to survive, adapt, and to compete (Leonard, 1998) and on the macro-level, determine the rate of economic growth. As European Union Internal Market and Services Commissioner Michel Barnier remarked: "It is my deeply held conviction there is no sustainable economic growth without innovation. And no innovation without efficient intellectual property protection" (EC, 2011).

IP law provides managers with various techniques to realize the value of knowledge (Bagley, 2008; Aliouat, 2009). These include copyrighting works, patenting inventions and processes, and protecting proprietary information (such as customer lists) as trade secrets. IP rights can be used both offensively to shut down a competing product and defensively as bargaining chips.

Patents can erect barriers to entry, reduce cost, and generate revenues. Licensing provided a way for IBM to capture the value of the discoveries that IBM did not have the ability to commercialize; it also distributed IBM's technology more broadly and increased its ability to influence the development of industry standards and protocols (Gerstner, 2002).

Patents, coupled with strong relationships with complementors and legal acuity, can be valuable bargaining chips. Unlike many of its competitors who were unwilling to take the litigation risk, EMC Corporation decided to acquire VMware, a pioneer in x86 software virtualization technology, even though VMware was embroiled in a patent infringement lawsuit with Microsoft at the time (Bagley et al., 2006). EMC's CEO Joe Tucci and its GC Paul Dacier convinced the board of directors that the benefits of the acquisition outweighed the risks. This calculus was based in part on EMC's ability to use its own patents as bargaining chips, its own internal expertise in litigating patent cases, its ability to limit its enterprise risk by doing a reverse triangular merger so VMware would be a separate subsidiary, and its relationship with Microsoft, which was both a competitor and a partner. About a year after the acquisition, Microsoft CEO Steve Ballmer called Tucci proposing that both sides dismiss their claims because "friends do not sue friends." A company that EMC acquired in 2004 for roughly $635 million had market capitalization of more than $43 billion on August 15, 2014. (EMC spun off 20 percent of VMware's shares in an initial public offering in 2007; as of August 15, 2014, EMC's 80 percent stake was worth roughly $34 billion, approximately 45 per cent of EMC's total market capitalization of $60 billion). Had EMC been unable to transform itself from primarily a commodity hardware manufacturer into a data solution provider, it would not be trading at its current multiple of roughly twenty-four times earnings.

Priceline.com, the brainchild of innovator Jay Walker, carved a defensible niche for itself in the buyer-driven transportation market by patenting the use of reverse auctions to match irrevocable offers to buy airline seats and other goods and services with opaque expressions of interest by sellers. Although the concepts of irrevocable offers and reverse auctions are centuries old, Priceline was the first firm to use it to create an entirely new market for cost-conscious buyers willing to sacrifice certainty regarding the exact times of travel and the carriers in exchange for cheaper seats. The service made it possible for multiple transactions to clear at the same instant at different prices, a key differentiator from the prior art embodied in existing systems, such as Nasdaq. The opacity gave airlines and other sellers of "disappearing assets" the ability to monetize excess capacity without undercutting their list prices. Because the marginal cost of filling an empty seat can be measured in the modest amount of extra jet fuel (if any) that may be required to absorb the weight of each extra passenger and piece of luggage, and the value of the empty seat (to the airline, at least, as compared with passengers hoping for some extra room) drops to zero once the plane takes off, airlines working with Priceline.com could increase their margins. When Microsoft's Expedia began using a similar system to sell hotel rooms, Priceline's patents gave it leverage to demand royalties from Expedia. Had the claims in the Priceline patent been drafted more narrowly, to apply to just the sale of tickets for transportation, Expedia would have been able to encroach on Priceline's turf with impunity.

Forbes (2015) calculated that the Apple brand was worth more than $103 billion as of November 2013. Krasnikov et al. (2009) found that brand-association trademarks, such as slogans, packaging, colors, scents, and shapes, increase cash flow and decrease cash flow variability. They are also positively associated with return on assets, stock returns, and Tobin's q (the ratio of a firm's market value to the replacement cost of its assets) (Krasnikov et al., 2009: 161).

Apple coupled the innovative design of its iPod device with a well-executed trademark strategy (Orozco and Conley, 2008: R6) and a copyright licensing strategy that avoided the pitfalls that had destroyed earlier entrants, such as MP3.com (Bagley and Martin, 2004). Apple registered both the iPod product name and the iPod product shapes as trademarks. Unlike MP3.com, which made digital copies of the music on its customers' compact discs without first securing a license (Bagley, 2008), Apple negotiated licensing contracts with the music copyright owners before offering digital downloads of that music from its iTunes store. Similarly, unlike the founder of Napster, who created innovative peer-to-peer file-sharing technology the firm could never effectively commercialize due to copyright issues (Bagley et al., 2001), Bram Cohen, the developer of a new way to use the internet to transfer very large computer files, successfully negotiated a licensing agreement between his firm BitTorrent and Warner Brothers for the lawful peer-to-peer distribution of movies (Bagley and Martin, 2006. Cohen understood the importance of not promoting the use of his software for illegal purposes and hired as the firm's lawyer Clive Davis, who had represented the record and film industry and had a reputation for protecting their IP rights.

Oftentimes the determination of whether a particular idea or invention is protectable is not clear cut. As technology becomes ever more complex, it is often the lawyers working day-to-day with the scientists and engineers who are in the best position to advise whether an idea is worth patenting or a program worth protecting as a trade secret or through a copyright. Moreover, it can be very difficult for even the most skilled patent experts to agree on what is or is not infringing. Competing firms in nascent fields may discover that neither firm has the rights to all the inventions needed to produce their product, which is why Amgen and Cetus ultimately settled their interleukin-2 patent litigation by agreeing to a royalty-free global perpetual cross-license. Recognizing that, legally astute managers will work with their strategically astute counsel to build a patent portfolio that can be used not only offensively but also as trading currency.

But IP rights, taken alone, are rarely, if ever, sufficient to create sustained competitive advantage. As Peteraf (1993: 187) explained, "If the innovation is no more than a clever and complex assembly of relatively available technologies, then no wall of patents could keep opponents out." Similarly Teece et al. noted that well-known companies, such as IBM, Philips, and Texas Instruments, "appear to have followed a 'resource-based strategy' of accumulating valuable technology assets, often guarded by an aggressive IP stance," but this strategy is often not enough to generate sustained competitive advantage (Teece et al., 1997: 515). Instead, they assert, "Winners in the global marketplace have been firms that can demonstrate timely responsiveness and rapid and flexible product innovation, coupled with the management capability to effectively coordinate and redeploy internal and external competences" (Teece et al., 1997: 515).

Firms must create an ongoing stream of innovation in response to both consumer needs for cheaper or more differentiated products or for what Apple co-founder Steve Jobs was a genius at anticipating: products customers did not realize they needed until they saw them. This is one reason why Jobs eschewed consumer focus groups, which for some firms are key to understanding and meeting consumer demand. To combat anti-innovation and other decision-making biases, firms must be willing to abandon successful product attributes and profitable product lines (and their attendant complementary assets, established capabilities, and embedded administrative routines) to make room for new approaches (Teece, 2007: 1332). Apple abandoned the thirty-pin charging system for iPhones and iPads even though it was very popular with consumers in favor of a smaller and lighter port. It also removed the optical disc drives consumers had come to expect in their laptops, which made possible thinner and lighter tablets and laptops.

A key function of Apple University, an in-house training program established by Steve Jobs in 2008 and headed by former Yale School of Management Dean Joel Podolny, is to develop and teach case studies designed to inculcate the unique Apple culture “where people there believe they’re making the best products that change people’s lives” (Ben Bajarin, quoted in Chen, 2014). The training programs seek to enhance managers’ ability to combine cutting-edge technology with elegant design, that is, to capture Jobs’ mantra that “function and beauty come from elegant simplicity” (Chen, 2014). For example, one case uses a series of eleven Pablo Picasso’s lithographs of a bull to show how he went from a detailed rendering to a series of lines that captured the essence of the animal’s shape (Chen, 2014). Another chronicled the fiercely debated decision to make Apple’s iPod and iTunes software compatible with Microsoft’s Windows operating system. By opening the iPod to Windows users, Apple explosively grew sales of the music player and increased utilization of the iTunes Store, “an ecosystem that would later contribute to the success of the iPhone” (Chen, 2014). Unlike the disastrous decision to give Microsoft a license to use aspects of Apple’s Macintosh GUI in exchange for porting Microsoft Office to the Macintosh, this time Apple was careful to expressly limit Microsoft’s rights to protect Apple’s proprietary technology.

Apple has not hesitated to buy the technology it has been unable to develop in-house. Successful acquisitions require not only highly negotiated acquisition agreements but also arrangements to ensure that whatever tacit information may be required to realize the value of those acquisitions is transferred or otherwise available as well. This is one reason why Apple tends to buy technology or firms outright instead of just licensing inventions.

In 2010, Apple acquired Siri, Inc., a spin-off from SRI International that created innovative voice recognition software subsequently embedded in iPhones and iPads. Three years later, Apple acquired PrimeSense, an Israeli firm that had developed cutting-edge gestural human-computer interface technology to meet consumers’ need for an easier way to interact with computers while doing video-gaming and other tasks (Bagley and Martin, 2012). PrimeSense had cancelled an initial meeting with Apple after Apple refused to sign PrimeSense’s non-disclosure agreement, which included a no-reverse-engineering clause. Instead PrimeSense became Microsoft’s OEM for the system-on-a-chip and certain optics used in Microsoft’s X-Box Kinect but only after Microsoft agreed not to appropriate PrimeSense’s trade secrets or attempt to reverse engineer its product (Bagley and Martin, 2013). Because PrimeSense did not give Microsoft an exclusive license to its technology, it kept aspects secret, and its engineers continued to innovate by adding different functionalities while reducing the size of its Capri product to the size of a pack of gum, the founders and their venture-capital investors were ultimately able to sell the firm as a whole to Apple in 2014 for roughly $350 million. Apple would have had access to PrimeSense's technology earlier had it been willing to be more flexible when first approached by PrimeSense about the firm's legitimate interests in protecting its proprietary technology.

One last point concerning IP bears mentioning. Although it is important for firms to legally protect their IP and to sue when necessary to enforce their rights, it is critical that the management team ensure that the process of litigating does not divert critical resources from the critical task of innovating. Polaroid ultimately won its lawsuit against Kodak for infringement of its patents on instant film and cameras, but the attendant management distraction and dedication of resources to the incumbent business most likely contributed to Polaroid's program persistence and anti-innovation biases (Teece, 2007: 1327), thereby contributing to Polaroid's (and Kodak's) failure to appreciate the threats and opportunities posed by digital photography. Similarly, Apple's multi-year litigation against Microsoft and Hewlett-Packard for copyright infringement probably distracted Apple from continuing to improve the Macintosh computer.

3.3.2 More Effectively Managing Human Resources

Law and legal tools affect the management of human resources in various ways. In many jurisdictions, with California being a notable exception, firms can protect tacit knowledge with covenants not to compete (Pivateau, 2011). The laws of most developed countries ban employment discrimination based on race, gender, religion, age, and certain other personal characteristics, such as disabilities. James and Wooten (2006: 1103) found that employment discrimination suits are "among the leading types of cases faced by business leaders in the United States." The law prohibits wrongful termination, making it important for firms doing reductions in force or otherwise terminating employees to do so in accordance with the local rules. For example, in the United States, most employees without an employment agreement are deemed employees at will, meaning that they can be fired or quit at any time for any or no reason. Most other developed countries require employers to show cause for termination or at least provide advance notice and pay some severance (Bagley, 2015a: 352–354). Judicial decisions increasing directors' exposure to personal liability for corporate decisions affect corporations' ability to attract and retain qualified independent directors (Kaplan and Harrison, 1993: 421–422).

Properly crafted executive compensation plans, tailored to the opportunities and threats of the specific firm, can help promote successful management. Conversely, high octane incentives can cause unduly risky behavior (Sanders and Hambrick, 2007), which can jeopardize the firm's license to operate, especially in highly regulated industries, such as banking, insurance, and pharmaceuticals.

There is evidence that firms that promote what Pfeffer (2010: 43) calls "human sustainability"—worker health and well-being by providing vacations, sick days, health insurance, training, and challenging work over which they have autonomy—outperform benchmark indices. But delegating to lawyers the authority to dictate the firm's HR practices without regard for the business model can reduce employees' willingness to make the firm-specific investments necessary in knowledge-intensive industries (Pfeffer, 1998). For example, Pfeffer cautions that ensuring the at-will status of employees by stating in employee handbooks that any employee may be terminated at any time for any or no reason and otherwise providing no job security will reduce the firm's legal exposure to wrongful termination suits, but at the cost of reducing employees' willingness to undertake tasks and learning that is not readily transferable to competitors. Yet, as Pfeffer notes, "[b]ackground and training are not necessarily destiny" (Pfeffer, 1998). Herb Kelleher, the CEO of Southwest Airlines, a firm Pfeffer lauds for its enlighted HR practices, is a lawyer by training. Legally astute managers ensure that their HR policies further the firm's business model by practicing strategic human resource management (Huselid, M. A. et al. 1997; Buller and McEvoy, 2012).

3.3.3 Creating Options and Overcoming Decision-Making Biases

Legally astute managers can use a variety of legal tools to create options (Bagley, 2008), thereby enhancing a firm's ability to reconfigure its assets. An option is the right, but not the obligation, to defer a decision until a future date. Real options theory posits that there is value inherent in the right to defer decisions characterized by uncertainty (Kogut and Kulatilaka, 2001). Examples include an option to purchase real property, the right to terminate a joint venture, subjecting a founder's shares to vesting, and securing co-investment rights in future venture-capital rounds (Bagley and Dauchy, 2011).

For example, a venture capitalist will rarely provide all the funding a start-up needs to take a product to market and generate sufficient cash flow to become self-funding. Instead, the investment is broken down into discrete rounds (such as Series A and Series B preferred stock). The valuation will vary from round to round depending on the progress to date. If it turns out that an investor has overpaid in a round, as evidenced by the inability of the firm to raise more capital at that same or a higher valuation, then anti-dilution provisions adjust the conversion ratio so the holder of preferred stock receives more shares of common upon conversion of the preferred shares in an initial public offering or sale of the company. Failure to tailor anti-dilution provisions to the corporate law of the state in which a corporation is domiciled can result in the loss of valuable shares in the event of certain stock dividends or stock splits. On the upside, early investors usually have the right to invest in future rounds so they can maintain or increase their percentage interest in a promising portfolio company.

Control provisions in the certificate of the determination of preferences for preferred stock and shareholder agreements subjecting the founders' shares to vesting typically give investors the right to replace the management team if it is not performing as expected, by transferring board control to directors elected by the preferred shareholders (Bagley and Dauchy, 2011). Requiring approval by the preferred shareholders, voting as a class, for certain major transactions, such as loans above a certain threshold amount and the sale of assets outside the ordinary course of business, ensures the investors' right to modify the business plan as needed to reflect emerging realities, including technological discoveries.

Thus, modern corporation laws, such as those in Delaware, give entrepreneurs and investors the ability to create their own private law enforceable by the state. Investors skilled in the adoption and application of such flexible legal rules and the use of legal tools are better equipped to combat both risk/loss aversion and overconfidence bias, which can both impede innovation (Teece, 2007: 1328).

Risk/loss aversion can cause individuals to overly discount the possibility that an uncertain result will be positive, that is, to be overly timid (Kahneman and Tversky, 1979; Kahneman and Lovallo, 1993). The former head scientist at the Xerox Palo Alto Research Center (Xerox PARC) attributed Xerox's failure to reap the rewards of its researchers' path-breaking inventions, such as object-based computing, the computer mouse, and the ethernet, to a corporate aversion to risk. Had Xerox patented its technology, it could have created an option to commercialize the technology itself, license it to another firm, or abandon it when the needs of the personal computer market became more clear.

Managers and investors can choose among a variety of organizational forms, such as limited liability companies, corporations, or partnerships. The directors of corporations and other entities offering limited liability for investors can make investments and borrow money, on either an unsecured basis or as collateralized loans, or do acquisitions, knowing that the business judgment rule will protect them from personal liability if the venture fails as long as they make informed and disinterested decisions in good faith (Bagley, 2015a: 610–617). As the Delaware Court of Chancery explained, "absent an allegation of interestedness or disloyalty to the corporation, the business judgment rule prevents a judge or jury from second guessing director decisions if they were the product of a rational process and the directors availed themselves of all material and reasonably available information" (*In re Citigroup Inc. Shareholder Derivative Litigation*, 2009: 124). These protections are "designed to allow corporate managers and directors to pursue risky transactions without the specter of being held personally liable if those decisions turn out poorly" (2009: 125).

The excessive optimism inherent in overconfidence bias “leads to investment in low or negative return projects” (Teece, 2007: 1327). By forcing investors to make a new investment decision each round, staged preferred stock investments both reduce the risk of failure and diminish the “irrational exuberance” that might accompany exposure to a novel, but not necessarily commercially viable, idea.

3.3.4 Practicing Strategic Compliance Management

A firm’s ability to protect assets is directly affected by its managers’ compliance with applicable law. Failure to meet legal requirements can result in fines and penalties for criminal and civil violations, such as the $3 billion in fines GlaxoSmithKline paid to resolve criminal and civil charges that it had promoted certain prescription drugs for non– Food and Drug Administration (FDA) approved uses (U.S. Department of Justice, 2012; Bagley et al., 2013); the payment of damages, such as the $3 billion Texaco paid Pennzoil for tortious interference with its agreement to buy Getty Oil (Kinnear, 2001); the termination of theretofore profitable lines of business, such as the closing of SAC Capital Advisors hedge fund after the firm was convicted of illegal insider trading (Lattman and Protess, 2013); or the termination or imprisonment of otherwise talented managers, such as Martin Winterkorn, the former CEO of Volkswagen, who resigned in 2015 after Volkswagen admitted “that it had programmed cars to detect when they were being tested and then turn on pollution controls” (Ewing, 2015: B3), and Raj Rajaratnam, head of Galleon Funds, who was imprisoned after being convicted of insider trading (Economist, 2013).

At the outer bounds, illegal behavior can destroy the going concern value of a firm. The demise of Drexel, Burnham Lambert in the wake of massive insider trading and securities fraud by Michael Milken and other officers of the firm (Stewart, 1991: 432–433) and of Lehman Brothers after its fraudulent off-balance-sheet “Repo 105” transactions (Craig and Spector, 2010) are but two examples of this.

By August 2014, financial institutions had paid more than $95 billion to resolve criminal and civil suits arising out of the sale of faulty subprime mortgages and toxic securities backed by such mortgages. The press characterized Bank of America’s willingness to pay up to $17 billion to settle civil claims brought by the U.S. Department of Justice for selling toxic subprime assets as a way to “accelerate Bank of America’s effort to return to the business of being a bank” (Protess and Corkery, 2014).

In 2015, Deutsche Bank agreed to pay about $2.5 billion in fines to settle charges of illegally rigging the London inter-bank lending rate (LIBOR), the lending benchmark for everything from student loans to commercial paper (Henning et al., 2015). Swiss bank UBS paid regulators $1.5 billion in 2012 to settle similar charges (Thompson and O’Toole, 2012). In 2015, Citicorp, JPMorgan Chase, Barclays, and the Royal Bank of Scotland agreed to plead guilty to conspiring to manipulate the price of U.S. dollars and euros exchanged in the foreign currency exchange spot market and to pay criminal fines in excess of $2.5 billion (Department of Justice, 2015). This was in addition to multi-billion dollar civil fines (Protess and Corkery, 2015).

Fraud alone can cost a typical company between one and six percent of annual sales (Schnatterly, 2003). Thus, according to Schnatterly, “The ability to prevent fraud, or value loss through fraud, has become a potential source of competitive advantage and improved financial performance from firms in today’s economy” (2003: 587).

In addition to the direct costs of sanctions (such as fines and punitive damages), the legal costs associated with investigations, litigation and appeals can be staggering. Barclays paid “£3.7 billion ($5.7 billion) in currency market manipulation litigation costs in 2014 as well as costs associated with dealing with a number of retail investor mis-selling scandals and writedowns from property loan portfolios” (Brinded, 2015). Deutsche Bank reserved roughly $1.6 billion in the first quarter of 2015 for legal fees related to its role in the LIBOR scandal, in addition to the $2.5 billion fine (Henning et al., 2015; Ewing, 2015).

Illegality can divert funds from strategic investments, tarnish a firm’s image with customers and other stakeholders, raise capital costs, and reduce sale volume (Baucus and Baucus, 1997). Convicted firms earned significantly lower returns on assets than unconvicted firms; multiple-conviction firms reported markedly lower returns than unconvicted firms (Baucus and Baucus, 1997). In the case of WorldCom, $200 billion of shareholder value was lost in fewer than twelve months, making it one of the largest corporate frauds in history (Breeden, 2003: 12).

Baucus and Near (1991) offered two alternative explanations for why corporations engage in illegal behavior: opportunity to behave illegally resulting from rules, procedures, and other control mechanisms lagging behind firm growth; and predisposition to select illegal activities because of socialization or other organizational processes. They found that firms operating in certain industries tended to engage in illegal activities and suggested that certain industry cultures may predispose managers to act illegally. They also posited that “some firms have a culture that reinforces illegal activity” by selectively recruiting and promoting employees with “personal values consistent with illegal behavior” and by socializing employees “to engage in illegal acts as a part of their normal job duties” (Baucus and Near, 1991: 31–32).

A firm with three or more violations is more likely to act illegally than a firm with only one (Baucus and Near, 1991). In fact, three or more prior violations may be the best predictor of illegal behavior (Baucus and Near, 1991). Thus, the firm’s history of legal compliance and its ethical traditions affect its "paths," that is, "the strategic alternatives available to the firm, and the presence or absence of increasing returns and attendant path dependencies" (Teece et al., 1997: 518).

Creating a law-abiding culture without impairing managers' desire and ability to compete hard is not easy. Microsoft's Bill Gates attributed IBM's loss of its competitive edge to the firm's preoccupation with winning an antitrust case brought by the U.S. Department of Justice in 1969 that was not dropped until 1982 (Playboy Interview: Bill Gates, 1994). Louis Gerstner Jr., who took over as IBM CEO in 1993, agreed (Gerstner, 2002).

Legally astute TMTs practice what Bagley (2005: 50) calls "strategic compliance management" both to promote legal compliance and to enhance the firm's ability to convert regulatory constraints into opportunities. There are ten steps:

1. Start with ethics and start with the "tone at the top."
2. Help shape the rules of the game.
3. Look for opportunities to convert constraints into opportunities.
4. Understand duties and anticipate risks.
5. Benchmark both accidents and violations, and near-misses.
6. Avoid conflicts of interest and fully disclose.
7. Implement appropriate controls and processes.
8. Compete hard but fairly.
9. Educate all employees and distribute written policies.
10. Be prepared to deal with compliance failures.
(Adapted from Bagley, 2005: 47–50)

Each firm must tailor its controls, processes, policies, and practices to the non-compliance risks that are most salient for that firm. Independent directors should "make it clear to the general counsel (and to the CEO and other senior management) that [they expect regular reports covering] … actual or potential material violations of law, breaches of fiduciary duty, and other 'substantial legal concerns'" (Horton, 2010: 195). Because this is not a case of one size fits all, "replication of best practice may be illusive" (Teece et al., 1997: 517).

Moreover, incentives matter: "If an employee is held accountable for traditional corporate tasks whose performance will determine his success or failure, and is also urged to undertake social objectives on which his performance is not measured, the result is inevitable. Even the most well-intentioned employee will devote his time and attention to the functions on which his career progress depends" (Drotning, 1974: 259). As Judge Doumar commented after a jury found Kidde liable for misappropriating trade secrets belonging to X-It (Bagley and Lane, 2003), a start-up that had developed an innovative fire escape ladder: “This case is the very epitome of corporate governance in the last decade of the twentieth century—where greed and the resultant pressure on corporate officers to produce results out of line with the actual value of the assets they manage turns those officers into vultures, devouring the very businesses which they are trying to enhance” (*X-It Products, L.L.C.*, 2002: 546).

There can be a seemingly fine line between the “innovations” that felled Enron and Lehman Brothers, which morphed into outright illegality, and the aggressive pursuit of realizable value by firms, like EMC, willing to push the edge of the envelope to seize opportunities. EMC GC Paul Dacier had the strategic astuteness to understand the disruptive potential of VMware, which is why, when asked by CEO Joe Tucci whether EMC could buy VMware, he responded, “Can you afford not to?” But not Dacier nor Tucci nor EMC’s board of directors ignored the very real risk that buying VMware could put at risk the assets of not just VMware but also of EMC. So the legally astute TMT and strategically astute legal team cabined that risk by keeping VMware as a separate subsidiary and by continuing to strengthen their partnerships with their litigation adversary Microsoft.

Under certain circumstances, a firm can create a competitive advantage by going beyond what the law requires. For example, at a time when the FDA was considering requiring firms to label their products to show the amount of hydrogenated oils and other trans-fats they contained, PepsiCo’s Frito Lay division stopped using trans-fats in its potato chips and other snacks, then obtained FDA approval to label its products prominently as having zero trans-fats, thereby increasing their appeal to customers.

3.3.5 Shaping the Regulatory Environment and other Aspects of the Firm’s Ecosystem

Firms do not operate in isolation from the societal context in which they are embedded (Bagley, 2005). Instead, “there is an inherently interactive and symbiotic relationship between the private business organization and the larger society that constitutes its host environment” (Preston and Post, 1975: 12). Accordingly, “anticipating, understanding, evaluating and responding to public policy developments within the host environment” is “itself a critical managerial task” (Preston and Post, 1975: 4). As U.S. Supreme Court Justice John Paul Stevens stated in his dissent in *Citizens United v. Federal Election Commission* (2010: 963), “[b]usiness corporations must engage the political process in instrumental terms if they are to maximize shareholder value.”

Firms can help shape the rules governing their conduct (Keim and Zeithaml, 1986; Hillman and Hitt, 1999; Shell, 2004; Teece, 2007). For example, clear and appropriate rules allocating IP rights to the government, to universities and their researchers, and to industrial partners and their scientists can facilitate the transfer of technology from the university research lab to the marketplace while preserving universities' historic role as discovers and disseminators of new knowledge (Bagley and Tvarnø, 2015). To support "start-ups, spin-offs, university-industry consortia, and other platforms" for translational medicine (Gaspar et al., 2012), for-profit firms need to work with public universities and government agencies to create an ecosystem conducive to both invention and commercialization (Bagley and Tvarnø, 2015).

Frederick W. Smith, founder of Federal Express, remarked that the hub-and-spoke system on which FedEx was predicated, " was all made possible because the government began to deregulate" (Bloomberg Business, 2004). He went on to state:

> That is a very big part of the FedEx story which has hardly ever been commented upon: The parallel effect of the relaxation of government regulation which allowed FedEx operations to begin with, in what was really a loophole. And then it was codified when airlines were deregulated in '77-'78. And then in 1980, the federal government deregulated interstate transportation. So it was [deregulation], much of which we induced.
>
> (Bloomberg Business, 2004)

The long-term success of two disruptive firms, ride-sharing service Uber and short-term housing rental service airbnb, will depend in substantial part on their ability to persuade regulators to govern their activities with a light touch. To date, Uber has been largely effective dealing with regulators in the United States (Hennessey, 2015), but its "no-holds-barred expansion strategy" has been less successful in Germany (Scott, 2016: B1). Uber reportedly "miscalculated how best to gain the support of skeptical locals unaccustomed to its win-at-all-costs tactics" and "underestimated the regulatory hurdles of doing business in Europe's largest economy" (Scott, 2016: B1). In 2015, airbnbspent millions successfully lobbying against San Francisco, California's Proposition F, which would have curtailed the number of days an owner could offer temporary housing (Weise, 2015), but the firm then adopted a more conciliatory approach, "pledging a renewed spirit of cooperation" with regulators (Isaac, 2015). After the voters rejected Proposition F, airbnb issued the Airbnb Community Compact, in which it agreed to pay its "'fair share'" of applicable hotel and tourist taxes and to address certain other regulatory concerns (Isaac, 2015).

The antitrust laws prohibit competitors from forming cartels and otherwise unreasonably restraining trade. Hector Ruiz, the CEO of Advanced Micro Devices, and his team orchestrated a strategy to compete on a more level playing field with Intel in the personal computer chip market by filing an antitrust lawsuit against Intel for illegal monopolization while selling its global chip manufacturing facilities to a newly created firm headed by Ruiz, a precondition to the emergency funding provided by Abu Dhabi's

Mubadala Development Company (Ruiz, 2013). The high-end manufacturer Leegin Creative Leather Products protected its luxury brand by persuading the U.S. Supreme Court to abandon the per se ban on minimum price fixing that had been the law of the land for more than 100 years in favor of the far less strict rule-of-reason standard, whereby a contract restraining trade will be upheld if the benefits to consumers outweigh the anticompetitive effects (*Leegin Creative Leather Products*, 2007).

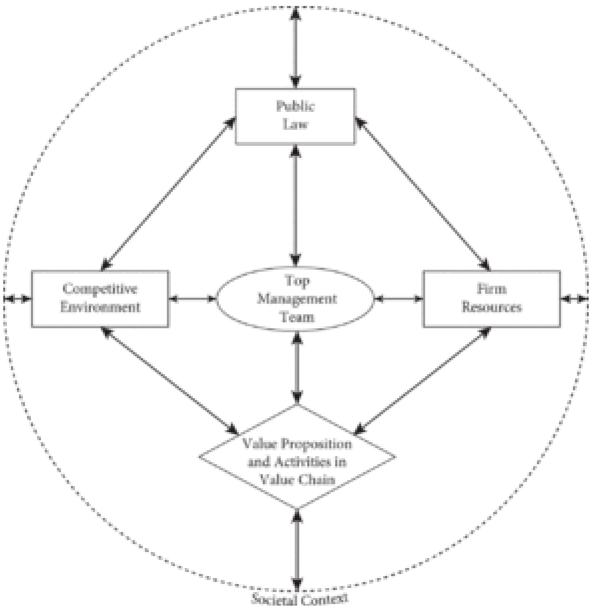
Instead of trying to weaken the Foreign Corrupt Practices Act of 1978, GE lobbied for a global ban on bribes (Heineman, 2008). GE thereby helped to eliminate the competitive disadvantage it faced when competing for government contracts with non-U.S. firms, such as Siemens. After devoting substantial resources to developing cleaner diesel engines, Cummins worked with the Environmental Protection Agency to create new tough standards for diesel emissions.

Researchers found that the ability of U.S. electric utilities to effect favorable public policy decisions over a 13-year period was influenced both by the internal capabilities of the firm seeking a rate increase from the state public utility commission and by the firm’s regulatory and political environment (Bonardi et al., 2006). When the telecommunications firm US West faced increased competition from cable companies using their cable networks to provide internet-based telephony, it recognized that it was at a competitive disadvantage because its status as a regulated telephone service provider precluded it from marketing internet services to its subscriber base (Bagley and Roellig, 2013). Instead of just telling the marketing team that they could not use the customers’ lists, its lawyers employed the creative strategy of suing to invalidate those restrictions based on the firm’s free speech rights under the U.S. Constitution. Importantly, US West did not violate the applicable limitations on use of its customer data; its TMT used litigation as a tool to change the rules of the game.

Yoffie and Bergenstein (1985) called on firms to develop an entrepreneurial strategy for creating and sustaining political advantage. For example, MCI sued AT&T for monopolization of the telecommunications industry, lobbied Congress, and testified at public hearings so it could enter what had been a highly regulated and closed market for telephone services. In the process, MCI enhanced its market share and its ability to raise equity. MCI’s business strategy and political strategy were “inextricably linked” and both were essential to the creation of MCI’s multibillion dollar business (Yoffie and Bergenstein, 1985: 136).

It is critical for management to ensure that the firm’s political activities are integrated into the business strategy (Baron, 1995) and for the board of directors to exercise informed oversight (Bagley et al., 2015). In *Citizens United v. Federal Election Commission* (2010), the U.S. Supreme Court gave American corporations the right to use corporate funds for electioneering activities. Since then, multiple firms have undermined their relationships with employees, customers, regulators, and other stakeholders by giving money to "political intermediaries"—such as the U.S. Chamber of Commerce, the largest lobbying organization in the United States—that support candidates with positions at odds with the firms' espoused values or strategy (Bagley et al., 2015). For example, employees and customers at firms as varied as Capital One Financial, Microsoft, and Target, were outraged when, contrary to the firms' public support for gay rights and diversity, the press revealed that the firms had contributed to lobbying groups funding anti-gay candidates. Contrary to CVS Health's articulated strategy of increasingly focusing on healthcare and well-being and its decision to stop selling tobacco products in its stores, the Chamber of Commerce, on whose board a CVS representative sat, was actively opposing anti-smoking initiatives around the world (Freed and Bagley, 2015). CVS subsequently resigned from the Chamber. Other Chamber members, including health insurance giants Anthem and Aetna, remained members and were publicly criticized for reportedly doing nothing about the Chamber's activities. As with outsourcing production without monitoring worker safety, blindly outsourcing corporate political spending is rife with danger (Bagley et al., 2015).

Even when a firm has developed a political or legal strategy aligned with its business strategy, not every attempt to shape the ecosystem will be successful. In 1992, managers at American Airlines, Delta Air Lines, and United Airlines were unable to persuade Transportation Secretary Andrew Card Jr. to withdraw flying certification rights from airlines that had filed for Chapter 11 bankruptcy, including Continental Airlines, Trans World Airlines, American West Airlines, and Metro Airlines (Hinthorne, 1996: 251).



Click to view larger

Figure 2 The systems approach to business, law, and strategy.

Bagley's (2010) systems approach to business, law, and strategy embeds the TMT of a firm in a dynamic competitive, regulatory, and societal system, with the power to help shape not only the firm's competitive environment and resources but also the "rules of the game" (North, 1990). As seen in Figure 2 (adapted from Bagley, 2010: 624), this integrated systems approach rejects Baron's (1995) bifurcation of the environment of business into market and non-market components but accepts his call for an integrated strategy for managing all aspects of the firm's environment. Like the dynamic capabilities approach, the systems approach situates the firm and its TMT within the firm's "ecosystem" (Teece, 2011: 4, 6)—"the community of organizations, institutions, and individuals that impact the enterprise and the enterprise's customers and supplie[r]s" (Teece, 2007: 1325), including not just competitors but also "complementors, suppliers, regulatory authorities, standard-setting bodies, the judiciary, and educational and research institutions" (Teece, 2007: 1325).

The integrated systems approach offers a framework for analyzing the moderating effect of the fit between a firms's legal, political, and corporate social responsibility practices and its resources, competitive environment, and business model (Teece, 2011) in a more nuanced manner. It also offers a lens for assessing the composition, competencies, and compensation of the TMT (Hambrick and Mason, 1984) and analyzing the effect they have on strategic choices and firm performance (Finkelstein et al., 2009; Siegel and Hambrick, 2005).

4 Degrees of Legal Astuteness

As depicted in Table 1 (Bagley, 2008: 383), there are degrees of legal astuteness.

Table 1 Degrees of legal astuteness.

		Degrees of Legal Astuteness	
		Low	**High**
Characteristics	*Attitude of TMT Toward Legal Dimensions of Business*	Not My Responsibility	Important Part of My Job
	TMT View of Lawyers	Necessary Evil	Partner in Value Creation and Risk Management
	Frequency of General Counsel (GC) Contact w/ CEO	Low	High
	Flow of Business Information and Legal Queries	On a Discrete Issue-by-Issue Basis	Ongoing
	GC Is Member of TMT	No	Yes
	TMT Approach to Legal Issues	Reactive	Proactive
	Involvement of TMT in Managing Legal Aspects of Business	Hands Off	Hands On

	TMT Approach to Regulation	Do Minimum to Comply	Exceed Regulatory Requirements as Result of Operational Changes that Increase Realizable Value
	Involvement of Lawyers in Strategy Formation	Low	High
	Involvement of Managers in Resolving Business Disputes	Low	High
	Involvement of Managers in Contract Negotiation	Low	High
	Involvement of Lawyers in Striking Deals	Low	High
	Legal Literacy of Managers	Low	High
	Business Acumen of Lawyers	Low	High

> Firms that attain a degree of legal astuteness that "fits" with their strategic posture and their external environment should realize greater value from this managerial capability than those who do not.
>
> (Bagley, 2008: 383)

For example, it is critical for the TMT of a highly regulated entity, such as a bank or an insurance agency, to ensure that it has in place a robust risk management system to protect its customers lest it lose its license to operate. As Pfeffer and Salancik (1978) explained, that is one reason why regulated utilities are more likely to have lawyers as CEOs than firms in non-regulated industries. SpencerStuart reported that 10.8 percent of the CEOs of companies in Standard & Poor's 500-stock index have law degrees (Bloomberg, 2004). U.S. News and World Report (Wecker, 2012) found that 46 of the 498 CEOs listed on the 2012 Fortune 500 list hold legal degrees. Of course, having a lawyer as the CEO is no guarantee of success. Lawyer-CEOs Charles O. Prince III of Citigroup and Franklin D. Raines of Fannie Mae both presided over a series of ill-advised subprime mortgage portfolio decisions that almost destroyed their firms. Hank Barry, a partner of Hummer Winblad Venture Partners and former law partner at Wilson, Sonsini, Goodrich and Rosati, took over as CEO of the ill-fated music peer-to-peer file sharing company Napster Inc., which was felled by ruinous copyright infringement litigation (Bagley et al., 2001).

5 Conclusion

The choices available to a management team engaged in sensing opportunities and threats, seizing opportunities, and marshaling and redeploying resources are bounded by the rule of law and the societal context. This ecosystem is not static, however. A legally astute TMT can help shape the "rules of the game." In addition, legally astute managers use the law and legal tools to increase realizable value, marshal resources, and manage risk.

Legal astuteness requires a set of value-laden attitudes, a proactive approach, the exercise of informed judgment, context-specific knowledge of the law and the use of legal tools, and strategically astute counsel. Legally astute TMTs can sense and shape opportunities by using a variety of legal structures to engage in R&D activities with others, such as university researchers, licensors, and joint venture partners. Rights of first refusal and co-investment and information rights give firms an early peek at the discoveries and progress of others. Inventions and customer lists and other data may be protectable as trade secrets. Social media and other vehicles provide an unprecedented ability to discern, anticipate, and explore customer needs, but the collection and use of personal data require strict adherence to the applicable laws and regulations governing privacy protection.

Legally astute managers can seize opportunities by (1) negotiating formal contracts as complements to relational governance to reduce transaction costs and strengthen relationships; (2) using legal tools to craft business models and make appropriate boundary choices; and (3) practicing strategic compliance management. They can enhance, combine, protect, and reconfigure intangible and tangible assets (Teece, 2007) by (1) using property and contract law, including IP protections, to secure the firm's ability to preclude others from appropriating its assets and to convert "dead capital" (DeSoto, 2000) into sources of funding for product development and growth by using its assets as collateral for loans or by buying and selling assets or an entire firm, knowing that structuring and operating the borrower or acquirer as a corporation or other entity with limited liability for investors can limit risk and combat risk/loss aversion; (2) more effectively managing human resources; (3) creating options and using legal tools and structures to overcome risk/loss aversion and overconfidence bias; (4) actively managing the risks of non-compliance and enhancing the ability to convert regulatory constraints into opportunities by practicing strategic compliance management; and (5) shaping the "rules of the game."

Acknowledgments

The author gratefully acknowledges research assistance provided by Gianmarco Massameno and Susan Schillaci as well as permission from the copyright owners to reproduce aspects of Bagley (2008), Bagley and Roellig (2013), Bagley and Roellig (2014), and Bagley (2015b).

References

Alberto-Aragon, J., and. Sharma, S. (2003). "A Contingent Resource-Based View of Proactive Corporate Environmental Strategy." *Academy of Management Review* 28: 71–88.

Aliouat, B. (2009). "Patents and Trademarks: From Business Law to Legal Astuteness". In A. Masson, and M. J. Shariff (Eds), *Legal Strategies: How Corporations Use Law To Improve Performance* (New York: Springer): 293–315.

American Bar Association Task Force on Corporate Responsibility (2003). "Report of the American Bar Association Task Force on Corporate Responsibility". *Business Lawyer* 59: 145–146.

Apple Computer, Inc. v. Microsoft Corp., 709 F. Supp. 925, 931–932 (N.D. Cal. 1989a).

Apple Computer, Inc. v. Microsoft Corp., 717 F. Supp. 1428, 1430–1432 (N.D. Cal. 1989b).

Apple Computer, Inc. v. Microsoft Corp., 799 F. Supp. 1006, 1041 (N.D. Cal. 1992).

Bagley, C. E. (2003). “Tool: Ethical Leader’s Decision Tree.” *Harvard Business Review* 81(2): 18–19.

Bagley, C. E. (2005). *Winning Legally: How to Use the Law to Create Value, Marshal Resources, and Manage Risk* (Boston, MA: Harvard Business Review Press).

Bagley, C. E. (2008). “Winning Legally: The Value of Legal Astuteness”. *Academy of Management Review* 33: 378–392.

Bagley, C. E. (2010). “What’s Law Got to Do With It? Integrating Law and Strategy”. *American Business Law Journal* 47: 587–639.

Bagley, C. E. (2015a). *Managers and the Legal Environment: Strategies for the 21st Century* (8th ed.) (Mason, OH: Cengage Learning).

Bagley, C. E. (2015b). “Integrating Law and Strategy: The Value of Legal Astuteness”. In Gross, W. P., and Vaagt, C. (Eds), *The Changing Role of the General Counsel in the 21st Century*. (London: Globe Law and Business): 11–17.

Bagley, C. E., and Dauchy, C. E. (2011). *The Entrepreneur’s Guide to Business Law* (4th ed.) (Mason, OH: Cengage Learning).

Bagley, C. E., Freed, B., and Sandstrom, K. (2015). “A Board Member’s Guide to Corporate Political Spending.” *Harvard Business Review*: 30 Oct., .

Bagley, C. E., and Lane, D. (2003). “X-IT and Kidde (B)”. Boston, MA: Harvard Business School Publishing, case no. 803–056.

Bagley, C. E., and Martin, R. (2004). “BitTorrent.” Boston, MA: Harvard Business School Publishing, case no. 806-169.

Bagley, C. E., and Martin, R. (2006). “Warner Brothers and BitTorrent”. Boston, MA: Harvard Business School Publishing, case no. 807–012.

Bagley, C. E., and Martin, R. (2012). “PrimeSense, Ltd. (A)”. New Haven, CT: Yale School of Management, case no. 12–023.

Bagley, C. E., and Martin, R. (2013). “PrimeSense, Ltd. and the Microsoft Kinect”. New Haven, CT: Yale School of Management, case no. 13–016.

Bagley, C. E., and Page, K. (1999). “The Devil Made Me Do It: Replacing Corporate Directors’ Veil of Secrecy with the Mantle of Stewardship”. *San Diego Law Review* 36: 897–945.

Bagley, C. E., and Roellig, M. (2013). “The Transformation of General Counsel: Setting the Strategic Legal Agenda”. In Weinstein, S., and Wild, C. (Eds), *Legal Risk Management, Governance and Compliance* (London: Globe Law and Business): 45–66.

Bagley, C. E., and Roellig, M. (2014). “General Counsel: Strategic Partners or Hired Guns?”. In European Company Lawyers Association (Coen, P., and Roquilly, C. (Eds), *Company Lawyers: Independent by Design* (Paris: Lexis-Nexis).

Bagley, C. E., Roellig, M., and Massameno, G. (forthcoming in 2016). “Who Let the Lawyers Out?: Reconstructing the Role of the Chief Legal Officer and the Corporate Client in a Globalizing World,” *University of Pennsylvania Journal of Business Law*.

Bagley, C. E., and Sherman, E. (2007a). “USG Corporation (A)”. Boston, MA: Harvard Business School Publishing, case no. 807–090.

Bagley, C. E., and Sherman, E. (2007b). “USG Corporation (B)”. Boston, MA: Harvard Business School Publishing, case no. 807–120.

Bagley, C. E., and Sherman, E. (2007c). “USG Corporation (C)”. Boston, MA: Harvard Business School Publishing, case no. 807–121.

Bagley, C. E., and Tvarnø, C. D. (2014). “Pharmaceutical Public-Private Partnerships in the United States and Europe: Moving from the Bench to the Bedside”. *Harvard Business Law Review* 4: 301–329.

Bagley, C. E., and Tvarnø C. D. (2015). “Promoting ‘Academic Entrepreneurship’ in Europe and the United States: Creating an Intellectual Property Regime to Facilitate the Efficient Transfer of Knowledge from the Lab to the Patient”. *Duke Journal of Comparative and International Law* 26: 1–77.

Bagley, C. E., Roberts, M. J., and Kiron, D. (2001) “Napster”. Boston, MA: Harvard Business School Publishing, case no. 801–219.

Bagley, C. E., Knoop, C. I., and Lombardi, C. J. (2006). “EMC Corp.: Proposed Acquisition of VMware”. Boston, MA: Harvard Business School Publishing, case no. 806–153.

Bagley, C. E., Mitts, J., and Tinsley, R. (2013). “Snake Oil Salesmen or Purveyors of Knowledge: Off-Label Promotions and the Commercial Speech Doctrine”. *Cornell Journal of Law and Public Policy* 23: 337–393.

Barney, J. B. (1991). “Firm Resources and Sustained Competitive Advantage”. *Journal of Management* 17(1): 99–120.

Barney, J. B., and Hansen, M. R. (1994). “Trustworthiness as a source of competitive advantage”. *Strategic Management Journal* 15, Special Issue: Competitive Organizational Behavior (Winter): 175–190.

Barney, J. B., Edwards, F. L., and Ringleb, A. H. (1992). “Organizational Responses to Legal Liability: Employee Exposure to Hazardous Materials, Vertical Integration, and Small Firm Production”. *Academy of Management Journal* 35: 328.

Barney, J. B., Wright, M., and Ketchen, D. J. Jr. (2001). “The Resource-Based View of the Firm: Ten years after 1991”. *Journal of Management* 27(6): 625–641.

Baron, D. P. (1995). “Integrated Strategy: Market and Nonmarket Components”. *California Management Review* 37(2): 47–66.

Baucus, M. S., and Baucus, D. A. (1997). “Paying the Piper: An Empirical Examination of Longer-Term Financial Consequences of Illegal Corporate Behavior”. *Academy of Management Journal* 40(1): 129–151.

Baucus, M. S., and Near, J. P. (1991). “Can Illegal Corporate Behavior Be Predicted: An Event History Analysis”. *Academy of Management Journal* 34(1): 9–36.

Bloomberg (2004). “A Compelling Case for Lawyer-CEOs”.

Bloomberg Business (2004). “Fred Smith on the Birth of FedEx”. 19 September, available at , accessed 27 October 2015.

Bonardi, J., Holburn, G., and Bergh, R. V. (2006). “Nonmarket Strategy Performance: Evidence from U.S. Electric Utilities”. *Academy of Management Journal* 49(6): 1209–1228.

Bozovic, I., and Hadfield, G. K. (2015). “Scaffolding: Using Formal Contracts to Build Informal Relations to Support Innovation,” *The Selected Works of Gillian K Hadfield*, available at ; .

Branzei, O., and Vertinsky, I. (2006). “Pathways to Product Innovation Capabilities in SMEs.” *Journal of Business Venturing* 21(1): 75–105.

Breeden, R. C. (2003). “Restoring Trust. Report to The Hon. Jed S. Rakoff on Corporate Governance for the Future of MCI, Inc., available at , accessed 27 October 2015.

Brinded, L. (2015). “The Fired Barclays CEO Had Two Nicknames Inside the Bank that Tell You Why He Was Forced Out,” *Business Insider*, 8 July, available at .

Buenstorf, G., and Geissler, M., (2012). “Not Invented Here: Technology Licensing, Knowledge Transfer and Innovation Based on Public Research”. *Journal of Evolutionary Economics* 22: 481–511.

Buller, P. F., and McEvoy, G. M. (2012). “Strategy, Human Resource Management and Performance: Sharpening Line of Sight”. *Human Resource Management Review* 22(1): 43–56.

Chayes, A., and Chayes, A. H. (1985). “Corporate Counsel and the Elite Law Firm”. *Stanford Law Review* 37(2): 277–300.

Chen, B. X. (2014). “Simplifying the Bull: How Picasso Helps to Teach Apple’s Style Inside Apple’s Internal Training Program”. *New York Times*, 11 August: A1.

Chesbrough, H., and Rosenbloom, R. S. (2002). “The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation’s Technology Spin-off Companies.” *Industrial and Corporate Change* 11(3): 529–555.

Citizens United v. FEC (2010). 130 S. Ct. 876, 963.

Clinard, M., and Yeager, P. C. (1980). *Corporate Crime* (New York: Free Press).

Colbert, B. A. (2004). “The Complete Resource-Based View: Implications for Theory and Practice in Strategic Human Resource Management”. *Academy of Management Review* 29(3): 341–358.

Craig, S., and Spector, M. (2010). “Repos Played a Key Role in Lehman’s Demise”. *Wall Street Journal*: 13 March: B1.

Daly M. C. (1997). “The Cultural, Ethical, and Legal Challenges in Lawyering for a Global Organization: The Role of General Counsel”. *Emory Law Journal* 46: 1057–1111.

Davenport, C., and Hakim, D. (2016). “U.S. Sues Volkswagen in Diesel Engine Emissions Scandal”. *New York Times* 5 January: B1.

DeMott, D. A. (2005). “Colloquium Ethics in Corporate Representation: The Discrete Roles of General Counsel”. *Fordham Law Review* 74: 955–982.

Dent, G. W. Jr. (2009). “Business Lawyers as Enterprise Architects”. *Business Lawyer* 64(2): 279–328.

Department of Justice (2015). “Press Release, Five Major Banks Agree to Parent-Level Guilty Pleas”, 20 May, available at .

DeSoto, H. (2000). *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York: Basic Books).

Drotning, P. T. (1974). “Organizing the Company for Social Action”. In S. P. Sethi (Ed.), *The Unstable Ground: Corporate Social Policy in a Dynamic Society* (Los Angeles, CA: Melville Publishing Company): 256–266.

Duggin, S. H. (2007). “The Pivotal Role of the General Counsel in Promoting Corporate Integrity and Professional Responsibility”. *Saint Louis University Law Journal* 51: 989–1042.

Dyer, J. (1997). “Effective Interfirm Collaboration: How Firms Minimize Transaction Costs and Maximize Transactional Value”. *Strategic Management Journal* 18(7): 535–556.

Dyer, J., and Singh, H. (1998). “The Relational View and Cooperative Strategy and Sources of Interorganizational Competitive Strategy and Sources of Interorganizational Competitive Advantage”. *Academy of Management Review* 23(4): 660–679.

Economist, The (2013). “Ship of Knaves”. *Economist*, 1 June: 81.

Eisenhardt, K. M., and Martin, J. A. (2000). “Dynamic Capabilities: What are They?” *Strategic Management Journal* 21: 1105–1121.

Ertel, D. (2004). “Getting Past Yes: Negotiating as if Implementation Mattered”. *Harvard Business Review* 82(11): 60–68.

European Commission (EC) (2010). “Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions”. *Europe 2020 Flagship Initiative, Innovation Union*, at 3, COM (2010) 546 final: Oct. 6.

European Commission (EC) (2011). “European Patents Costs to Be Radically Reduced”, available at , accessed 27 October 2015.

Ewing, J. (2015). “Deutsche Bank Profit Falls on Legal Costs”. *N.Y. Times/Dealbook*, 26 April, .

Ewing, J., and Mouawad, J. (2015). “3 Directors Say VW Hid Deceit from the Board”. *New York Times*, 24 October: A1.

Finkelstein, S., Hambrick, D. C., and Cannella, A. (2009). *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards* (Oxford: Oxford University Press).

Flint, J. (2015). “Busted Deal a Black Eye for Roberts”. *Wall Street Journal*, 24 April: A2.

Forbes (2015). “The World’s Most Powerful Brands”, available at , accessed 27 October 2015.

Freed, B. F., and Bagley, C. E. (2015). The CLS Blue Sky Blog: Columbia Law School’s Blog on Corporations and the Capital Markets, 14 December, available at .

Gaspar, R., Aksu, B., Cuine, A., Danhof, M., Takac, M. J., Linden, H. H., Link, A., Muchitsch, E. M., Wilson, C. G., Ohrngren, P., and Dencker, L. (2012). “Towards a European Strategy for Medicines Research (2014-2020): The EUFEPS Position Paper on Horizon 2020”. *European Journal of Pharmaceutical Sciences* 47: 979–987.

Gerstner, L. V. Jr. (2002). *Who Says Elephants Can’t Dance?* (New York: Harper Business).

Ghoshal, S., and Moran, P. (1996). “Bad for Practice: A Critique of the Transaction Cost Theory”. *Academy of Management Review* 21(1): 13–47.

Gilson, R. J. (1984). “Value Creation by Business Lawyers: Legal Skills and Asset Pricing”. *Yale Law Journal* 94(2): 239–313.

Gilson, R. J. (2010). “Locating Innovation: The Endogeneity of Technology, Organizational Structure, and Financial Contracting”. *Columbia Law Review* 110(3): 885–917.

Hambrick, D. C., and Mason, P. A. (1984). “Upper Echelons: The Organization as a Reflection of its Top Managers”. *Academy of Management Review* 9(2): 193–206.

Heineman, B. W. Jr. (2007). “Avoiding Integrity Land Mines”. *Harvard Business Review* 85(4): 100–108.

Heineman, B. W. Jr. (2008). *High Performance with High Integrity* (Boston, MA: Harvard Business School Press).

Hennessey, R. (2015). “New York City Caves on Plan to Cap Uber Drivers”, *Entrepreneur.com*: 22 July, available at , accessed 7 January 2016.

Henning, E., Enrich, D., and Strasburg, J. (2015). “Deutsche Bank Co-CEOs Jain and Fitschen Resign”, *Wall Street Journal*, 7 June, available at .

Hillman, A., and Hitt, M. (1999). “Corporate Political Strategy Formulation: A Model of Approach, Participation, and Strategy Decision”. *Academy of Management Review* 24(4): 825–842.

Hinthorne, T. (1996). “Predatory Capitalism, Pragmatism, and Legal Positivism in the Airlines Industry”. *Strategic Management Journal* 17(4): 251–270.

Holmes, O. W., Jr. (1897). “The Path of the Law”. *Harvard Law Review* 10: 457.

Horton, W. W. (2010). “Serving Two (or More) Masters: Professional Responsibility Challenges for Today’s In-House Counsel”. *Journal of Health and Life Sciences Law* 3: 187–228.

Huselid, M. A., Jackson, S. E., and Schuler, R. S. (1997). “Technical and Strategic Human Resource Management Effectiveness as Determinants of Firm Performance”. *Academy of Management Journal*, 40: 171–188.

In re Citigroup Inc. Shareholder Derivative Litigation (2009). 964 A.2d 106 (Del. Ch. 2009).

Ingrassia, L., and Hirsch, J. S. (1990). “Polaroid’s Patent Case Award, Smaller than Anticipated, Is a Relief for Kodak”. *Wall Street Journal*, 15 October: A3.

Isaac, M. (2015). “Airbnb Pledges to Work with Cities and Pay ‘Fair Share’ of Taxes”. *New York Times*, 11 November, available at , accessed 7 January 2016.

Jagolinzer, A. D., Larcker, D. F., and Taylor, D. J. (2011). “Corporate Governance and the Information Content of Insider Trades”. *Journal of Accounting Research* 49(5): 1249–1274.

James, E. H., and Wooten, L. P. (2006). “Diversity Crises: How Firms Manage Discrimination Lawsuits”. *Academy of Management Journal* 49(6): 1103–1118.

Kahneman, D., and Lovallo, D. 1993. “Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking”. *Management Science* 39(1): 17–31.

Kahneman, D., and Tversky, A. (1979). “Prospect Theory: An Analysis of Decisions under Risk”. *Econometrica* 47(2): 263–291.

Kaplan, M. R., and Harrison, J. R. (1993). “Defusing the Director Liability Crisis: The Strategic Management of Legal Threats”. *Organization Science* 4: 412–432.

Keim, G. D., and Zeithaml, C. P. (1986). “Corporate Political Strategy and Legislative Decision Making: A Review and Contingency Approach”. *Academy of Management Review* 11(4): 828–843.

Kinnear, J. (2001). *The Man Who Wore the Star—Real-Time Perspectives on a Business Leader’s Changing World* (Albany, NY: Business Council of New York State).

Kogut, B., and Kulatilaka, N. (2001). "Capabilities as Real Options". *Organization Science* 12(6): 744–758.

KPMG International Cooperative. (2012). *Beyond the Law: KPMG's Global Study of How General Counsel Are Turning Risk to Advantage*.

Krasnikov, A., Mishra, S., and Orozco, D. (2009). "Evaluating the Financial Impact of Branding Using Trademarks: A Framework and Empirical Evidence". *Journal of Marketing* 73(6): 154–166.

Kronman, A. T. (1995). *The Lost Lawyer: Failing Ideals of the Legal Profession* (Boston, MA: Harvard University Press).

LaMonica, M. (2007). "Stirring GE's Ecomagination". *CNET News.com*, 26 October, available at , accessed 27 October.

Langevoort, D. C. (2012). "Getting (Too) Comfortable: In-house Lawyers, Enterprise Risk, and the Financial Crisis". *Wisconsin Law Review* 2012: 493–520.

Lattman, P., and Protess, B. (2013). "$1.2 Billion Fine for Hedge Fund SAC Capital in Insider Case". *New York Times.com/Dealbook*, 4 November, available at .

Learned, E. P., Christensen, C. R., Andrews, K. R., and Guth, W. D. (1969). *Business Policy: Text and Cases* (Homewood, IL: Richard D. Irwin).

Leegin Creative Leather Products, Inc. v. PSKS, Inc. (2007). 551 U.S. 877.

Leonard, D. A. (1998). *Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation* (Boston, MA: Harvard Business School Press).

Linowitz, S. M., and Mayer, M. (1994). *The Betrayed Profession: Lawyering at the End of the Twentieth Century* (New York: Scribner).

Lowe, R. (2012). "Compliant Counsel". *In-House Perspective* 8(2): 13–16.

Macaulay, S. (1963). "Non-Contractual Relations in Business: A Preliminary Study". *American Sociological Review* 28(1): 55–67.

McBarnet, D. (2006). "After Enron Will 'Whiter than White Collar Crime' Still Wash?" *British Journal of Criminology* 46(6): 1091–1109.

Mnookin, R. H., Peppet, S. R., and Tulumello, A. S. (2000). *Beyond Winning: Negotiating to Create Value in Deals and Disputes* (Cambridge, MA: Harvard University Press).

Nelson, R., and Winter, S. (1982). *An Evolutionary Theory of Economic Change* (Cambridge, MA: Harvard University Press).

Nelson, R. L., and Nielsen, L. B. (2000). “Cops, Counsel, and Entrepreneurs: Constructing the Role of Inside Counsel in Large Corporations”. *Law and Society Review* 34(2): 457–494.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance* (New York: Cambridge University Press).

North, D. C., and Weingast, B. R. (1989). “Constitutions and Commitments: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England”. *Journal of Economic History* 49(4): 803–832.

Orozco, D., and Conley, J. G. (2008). “Shape of Things to Come”. *Wall Street Journal*. 12 May: R6.

Ostas, D. T. (2009). “Legal Loopholes and Underenforced Laws: Examining the Ethical Dimensions of Corporate Legal Strategy”. *American Business Law Journal* 46(4): 487–529.

Peteraf, M. A. (1993). “The Cornerstones of Competitive Advantage: A Resource-Based View”. *Strategic Management Journal* 14(3): 179–191.

Pfeffer, J. (1998). *The Human Equation: Building Profits by Putting People First* (Boston, MA: Harvard Business School Press).

Pfeffer, J. (2010). “Building Sustainable Organizations: The Human Factor”. *Academy of Management Perspectives* 24: 34–45.

Pfeffer, J. (2015). “How Can We Fix America’s Broken Telecommunications Industry?” *Fortune.com*, 4 May, available at , accessed 27 October 2015.

Pfeffer, J., and Salancik, G. (1978). *The External Control of Organizations: A Resource Dependence Perspective* (New York: Harper & Row).

Pisano, G., Shan, W., and Teece D. J. (1988). “Joint Ventures and Collaboration in the Biotechnology Industry”. In D. Mowery (Ed.), *International Collaborative Ventures in U.S. Manufacturing* (Cambridge, MA: Ballinger): 183–222.

Pivateau, G. T. (2011). “Preserving Human Capital: Using the Noncompete Agreement to Achieve Competitive Advantage”. *Journal of Business, Entrepreneurship and the Law* 4: 319–343.

"Playboy Interview: Bill Gates" (1994). *Playboy*: July: 55–68; 153–154.

Poppo, L., and Zenger, T. (2002). "Do Formal Contracts and Relational Governance Function as Substitutes or Complements?". *Strategic Management Journal* 23(8): 707–725.

Preston, L. E., and Post, J. E. (1975). *Private Management and Public Policy: The Principle of Public Responsibility* (Englewood Cliffs, NJ: Prentice Hall).

Protess, B., and Corkery, M. (2014). "Bank of America Offers U.S. Biggest Settlement in History Over Toxic Mortgage Loans". *New York Times.com/Dealbook*: 6 August, available at , accessed 27 October 2015.

Protess, B., and Corkery, M. (2015). "Tempered Penalties for Guilty Pleas". *New York Times.com/Dealbook*: 14 May, available at , accessed 27 October 2015.

Rai, A. K., Reichman, J. H., Uhlir, P. F., and Crossman, C. (2008). "Pathways Across the Valley of Death: Novel Intellectual Property Strategies for Accelerated Drug Discovery". *Yale Journal of Health Policy, Law & Ethics* 8: 1–36.

Ramachandran, S. (2015). "Comcast to Drop Big Cable Merger". *The Wall Street Journal*. 24 April: A1.

Ruiz, H. (2013). *Slingshot: AMD's Fight to Free an Industry from the Ruthless Grip of Intel*. (Greenleaf Book Group LLC).

Sanders, W. G., and Hambrick, D. C. (2007). "Swinging For the Fences: The Effects of CEO Stock Options on Company Risk-Taking and Performance". *Academy of Management Journal* 50(5): 1055–1078.

Schnatterly, K. (2003). "Increasing Firm Value through Detection and Prevention of White-Collar Crime". *Strategic Management Journal* 24(7): 587–614.

Schumpeter, J. A. (1934). *Theory of Economic Development* (Cambridge, MA: Harvard University Press).

Schwarcz, S. L. (2007). "Explaining the Value of Transactional Lawyering". *Stanford Journal of Law, Business & Finance* 12(2): 486–535.

Scott, M. (2016). "Uber Backs Down". *New York Times*, 4 January: B1.

Shell, G. R. (2004). *Make the Rules or Your Rivals Will* (New York: Crown Business).

Siegel, P., and Hambrick, D. C. (2005). "Pay Disparities within Top Management Groups: Evidence of Harmful Effects on Performance of High-Technology Firms". *Organization Science* 16(3): 259–274.

Simmons, O. S. (2009). "The Under-Examination of In-House Counsel". *Transactions: Tennessee Journal of Business Law* 11(1): 145–150.

Stewart, J. B. (1991). *Den of Thieves* (New York: Simon and Schuster).

Surowiecki, J. (2012). "The Financial Page: Blackberry Season". *The New Yorker*, 13 and 20 February: 38.

Swanson, D. L. (1995). "Addressing a Theoretical Problem in Reorienting the Corporate Social Performance Model". *Academy of Management Review* 20(1): 43–64.

Teece, D. J. (2007). "Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance". *Strategic Management Journal* 28: 1319–1350.

Teece, D. J. (2011). *Dynamic Capabilities & Strategic Management: Organizing for Innovation and Growth* (Oxford: Oxford University Press).

Teece, D. J. (2012). "Dynamic Capabilities: Routines versus Entrepreneurial Action". *Journal of Management Studies* 49(8): 1395–1401.

Teece, D. J., Pisano, G., and Shuen, A. (1997). "Dynamic Capabilities and Strategic Management". *Strategic Management Journal* 18(7): 509–533.

Terrell, T. P. (2009). "Professionalism on an International Scale: The Lex Mundi Project to Identify the Fundamental Shared Values of Law Practice". *Emory International Law Review* 23(2): 469–582.

Thompson, M., and O'Toole, James (2012). "UBS to Pay $1.5 Billion for Libor Fraud; Two Traders Charged". *Money.CNN.com*, 19 Dec., available at .

United States Department of Justice (2012). "GlaxoSmithKline to Plead Guilty and Pay $3 Billion to Resolve Fraud Allegations and Failure to Report Safety Data", available at , accessed August 15, 2014.

WarrenBuffett.com. (2014). "Warren Buffett Will Most Likely Acquire USG". 26 January, available at , accessed 27 October 2015.

Wecker, M. (2012). "Table: Where the Fortune 500 CEOs Went to Law School". *U.S. News and World Report*, 26 June, available at , accessed 27 October 2015.

Weise, E. (2015). “San Francisco Rejects Anti-Airbnb Measure”. *USA Today*, 4 November, available at .

Wernerfelt, B. (1984). “A Resource-Based View of the Firm”. *Strategic Management Journal* 5(2): 171–180.

Williamson, O. E. (1975). *Markets and Hierarchies* (New York: The Free Press).

Williamson, O. E. (1985). *The Economic Institutions of Capitalism: Firms, Markets and Relational Contracting* (New York: Simon and Schuster).

X-It Products, L.L.C. v. Walter Kidde Portable Equipment, Inc. (2002). 227 F.Supp.2d 494 (E.D. Va. 2002).

Yoffie, D. B., and Bergenstein, S. (1985). “Creating Political Advantage: The Rise of the Corporate Political Entrepreneur”. *California Management Review* 28(1): 124–139.

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