

Using Legal Knowledge to Innovate in VUCA Environments

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Abstract: The legal environment is a significant source of disruption for business. With this disruption also comes the opportunity for innovation by firms willing to understand how legal systems function. This manuscript shows how firms can respond to legal volatility, uncertainty, complexity, and ambiguity (VUCA) in order to capture value and manage risk. Firms can manage legal volatility by developing a legally agile organization that is able to exploit new regulatory opportunities before competitors. Firms can manage legal uncertainty by harmonizing legal and business functions and embracing lawyers as a source of strategy. Effective management of legal complexity eliminates unnecessary confusion and optimizes the diffusion of legal knowledge so firms can respond better to legal challenges. Firms can thrive in legally ambiguous environments by careful experimentation and developing a learning organization. Law remains one of the last great sources of untapped competitive advantage, and managing legal VUCA successfully can keep a firm ahead of its rivals and promote innovation in the organization.

The legal environment of business is a major source of disruption for global companies. Legislative bodies enact rules based upon social and political forces beyond the effective control of business. Courts set new legal precedent in a manner difficult to anticipate. Regulatory authorities exercise broad and sometimes unpredictable discretion to enforce and interpret established regulations. The emergence of new national markets with their own legal rules multiplies the potential for disruption. Legal disruption can provoke unnecessary risk and encourage decision-making paralysis, as firms potentially hold up multi-billion dollar investments to plan for rules that have yet to be written or are too opaque to offer clear direction.¹

The disruption generated by the legal environment of business is suppressing innovation. Uncertainty of new post-recession banking rules impede capital acquisition, discourage investments in innovation, and delay job growth.² Unclear patent legislation discourages innovation by enabling entities known as ‘patent trolls’ to acquire patents solely to extract legal settlements from alleged infringers.³ Regulatory complexity and uncertainty erode the ability of entrepreneurs to launch new firms, expand their operations, and generate new jobs.⁴ As a legal counsel of a large multinational explained, “As long as I know what is required of me, I can deal with even the most stringent [regulatory] requirements. It may be costly, introducing complex and excessive bureaucracy to the company, but these challenges are manageable—and they pale in comparison to uncertainty”.⁵

¹ Geoff Colvin, *Uncertain of Future Regulation, Businesses are Paralyzed*, FORTUNE, Oct. 10, 2010, http://archive.fortune.com/2010/10/19/news/economy/business_paralysis.fortune/index.htm.

² Richard Williams, *The Impact of Regulation on Investment and the U.S. Economy*, MERCATUS CENTER (2011), available at, <https://www.mercatus.org/publication/impact-regulation-investment-and-us-economy>.

³ Patrick Hall, *Patent Law Broken, Abused to Stifle Innovation*, WIRED, July 2013, <https://www.wired.com/insights/2013/07/patent-law-broken-abused-to-stifle-innovation>.

⁴ Sean Hackbarth, *How Excessive Regulations Stifle Small Businesses*, U.S. CHAMBER OF COMMERCE (2014), <https://www.uschamber.com/above-the-fold/how-excessive-regulations-stifle-small-businesses>.

⁵ François Garnier, *In No Uncertain Terms: Regulatory Uncertainty Rather Than Complexity is the Biggest Challenges Facing General Counsel of Multinationals*, in GLOBAL INVESTIGATIONS: READING THE SIGNALS 2, 2 (James R.M. Killck et al. eds., 2014), available at <http://awa2015.concurrences.com/IMG/pdf/web-white-case-global-investigations-reading-the-signals.pdf>.

The disruption can also be source of innovation.⁶ Law is one of the most influential factors in a firms' business environment and remains "the last great untapped source of competitive advantage" in business.⁷ Emerging academic movements, known as 'legal strategy' in the US and 'proactive law' in the EU, highlight how firms can leverage their legal resources to capture value, manage disruption, and promote innovation.⁸ Legal innovation, the development of new regulatory techniques and institutions to respond to societal challenges,⁹ not only improves social welfare but presents valuable opportunities for business. Managers should not simply follow industry norms, but diverge from them in order to make innovation optimally effective on firm performance.¹⁰ Managers who take the time to embrace legal disruption can understand how legal systems work better than rivals, and create value where others see only problems.

The legal environment of business is a powerful force both ripe with potential and laden with volatility, uncertainty, complexity, and ambiguity – collectively known as VUCA. Volatility subjects firms to changes that are unexpected and unstable. Uncertainty burdens companies with a lack of information. Complexity shrouds information in inaccessible density and interconnectivity. Ambiguity denies firms the ability to realize what they don't know about both a lack of knowledge and a lack of predictability about the situation encountered.

VUCA has its origins in the US military, which coined the term to facilitate decision making in environments of substantial risk and uncertainty.¹¹ Military experts argued that a VUCA environment requires hierarchical and linear strategic thinking to give way to non-linear cognition and decision-making.¹² Leaders in such an environment recognize key issues, prioritize alternatives, and integrate information from multiple sources and relationships.¹³ Strategic thinking such as VUCA and related strategic thinking has been identified as an important part of military education.¹⁴ The VUCA model was then adopted by commentators in business to describe the inherent and rapid instability of the global economic environment. VUCA conditions were considered by some to be the "new normal" for global markets.¹⁵ Managers therefore should adapt their conduct and thinking to an environment that will be continually dynamic and chaotic.¹⁶

⁶ See Clayton M. Christensen et al., *What is Disruptive Innovation?*, HARV. BUS. REV., Dec. 2015, at 44.

⁷ Larry Downes, *First, Empower All the Lawyers*, HARV. BUS. REV., Dec. 2004, at 19, 19. See also GEORGE SIEDEL & HELENA HAAPIO, *PROACTIVE LAW FOR MANAGERS: A HIDDEN SOURCE OF COMPETITIVE ADVANTAGE* (2011).

⁸ See, e.g., Gerlinde-Berger Walliser, *The Past and Future of Proactive Law: An Overview of the Development of the Proactive Law Movement*, in *PROACTIVE LAW IN A BUSINESS ENVIRONMENT* 13 (G. Berger-Walliser & K. Østergaard eds., 2012).

⁹ Ruth L. Okediji, *Legal Innovation in International Intellectual Property Relations: Revising Twenty-One Years of the TRIPS Agreement*, 36 U. PA. J. INT'L L. 191, 195 (2014); Nuno Garoupa & Thomas S. Ulen, *The Market for Legal Innovation: Law and Economics in Europe and the United States*, 59 ALA. L. REV. 1555, 1564 (2008).

¹⁰ See, e.g., Fariborz Damanpour et al., *Combinative Effects of Innovation Types and Organizational Performance: A Longitudinal Study of Service Organizations*, 46 J. MGMT. STUD. 650 (2009).

¹¹ Volker Frank, *Decision-Making Under Uncertainty: Using Case Studies for Teaching Strategy in Complex Environments* 2, CTR. MIL. & STRAT. STUD. (2011)

¹² *Id.*

¹³ *Id.*

¹⁴ See, e.g., Gabriel Marcella & Stephen O. Fought, *Teaching Strategy in the 21st Century*, 52 JOINT FORCES Q. 56 (2009).

¹⁵ Thorsten Kuznick, *Risk Management in a VUCA World: Practical Guidelines Based on the Example of a Multinational Retail Group*, in *MANAGING IN A VUCA WORLD* 77, 80 (Oliver Mack et al. eds., 2016).

¹⁶ *Id.*

A firm that mismanages legal VUCA, or ignores it altogether, places itself at unnecessary risk of costly private litigation and public sanction. A firm that leverages legal VUCA can exploit unexpected legal developments, enable first-mover advantages, penetrate new markets with agility, or quickly react before rivals when legal environments change. Understanding legal VUCA also encourages engaged partnerships between businesspeople and legal knowledge providers, a collaboration too often neglected in the executive suite and in management. Such partnerships can augment product development and scientific research with greater returns through reduction of legal risks. Firms that seamlessly integrate law and business through VUCA management acquire legal astuteness, the ability of law-business management teams to communicate effectively and leverage resources,¹⁷ thus giving firms advantages over rivals under robust VUCA conditions that are difficult to duplicate.

The concept of VUCA has been previously developed by military and management theorists. This article applies VUCA to previously unexplored subject, the legal environment of business. Whether as a legal opportunity or a risk, legal VUCA cannot be safely ignored. VUCA in the legal environment of business is both a challenge and opportunity for firms willing to embrace it. This manuscript examines how firms can leverage legal volatility, uncertainty, complexity, and ambiguity into opportunities for innovation and value creation. These recommendations are summarized in Exhibit 1. This manuscript concludes that the legal environment of business is a robust source of value creation for firms that take the time and resources to genuinely understand how legal systems impact strategy and innovation.

I. Respond to Legal Volatility with Agility and Preparation

Volatility occurs when the size of changes in a given environment are fundamentally unpredictable.¹⁸ Volatile change is expressed through three traits. First, volatility is generally unexpected. Firms facing volatility cannot easily predict when the change is timed to occur. Volatile events do not respond well to planning and are not tied to characteristics typically within the control of business. Second, volatility is unstable. When a volatile event does occur, the variance of change can be limited or significant. The volatile event can happen unexpectedly but consistently remain until the event ends or rapidly fluctuate without warning. Third, volatile events happen for an unknown duration. Such events can arise and disappear quickly or remain a chronic problem. Volatile events generally do not offer warning when the instability will disperse, forcing firms to plan for long durations at significant cost.

Volatility, however, does not imply a lack of knowledge. The causes of volatile events are generally understood by firms. For example, volatility in stock markets can be caused by economic shocks and volatility in consumer behavior can arise from rapidly emerging trends in social media. Firms also know how volatility can disrupt their operations. Shocks from volatility can disrupt manufacturing supply chains, accounting cash flows, and relationships with vendors and suppliers. Volatility is also not necessarily complex. A single, easily understood event can reverberate volatility across an entire industry. The problem with volatility is the explosiveness in which it can arise and its unpredictable magnitude of disruption that create an enduring problem for firm strategy and innovation.¹⁹

¹⁷ Constance E. Bagley, *Winning Legally: The Value of Legal Astuteness*, 33 ACAD. MGMT. REV. 378, 378 (2008).

¹⁸ Oliver Mack & Anshuman Khare, *Perspectives on a VUCA World*, *supra* note 15, at 3, 5-6.

¹⁹ Nathan Bennett & G. James Lemoine, *What a Difference a Word Makes: Understanding Threats to Performance in a VUCA World*, 57 BUS. HORIZONS 311, 313-14 (2014).

Legal volatility is the sudden and unexpected change that stems from government policy, administrative regulation, and enforcement of claims by private actors. One of the most significant sources of volatility from private actors is litigation. Virtually every aspect of a firm's conduct is subject to the threat of lawsuits. Contract disputes, employment claims, labor strikes, antitrust challenges, intellectual property infringement, environmental mismanagement, and insider trading scandals are but a few of the many sources of legal volatility. Securities class action litigation lawsuits, a costly threat fueled by increased volatility in securities markets, are being filed faster and more frequently even as the number of publicly held companies and initial public offerings decline.²⁰ Such filings can destroy billions in shareholder value, increase insurance premiums, and impair firm reputation.²¹ Manufacturing, pharmaceutical, and other industries are vulnerable to products liability litigation arising from defective or harmful goods. Six mass tort lawsuits in the pharmaceutical industry alone resulted in payouts to plaintiffs exceeding \$1 billion.²² The risks of such exposure to high awards in products liability cases suppresses innovative activity and encourages desirable products to be withdrawn.²³

Government entities can also create volatility. Legislators can hastily overreact to public scandal by enacting unnecessarily burdensome rules. Voter frustration, rather than business interests, can dominate policy. In emerging markets, government officials may make promises that they don't keep in order to attract foreign direct investment.²⁴

The costs of mishandling volatility can be substantial. Regulators are empowered to sue firms for significant penalties if violations occur. Agencies charged with protection of the securities markets can prosecute firms who insufficiently disclose required information or commit securities fraud. Government penalties can be significant. Energy firm BP paid over \$20 billion to settle claims arising from the Deepwater Horizon oil spill and JPMorgan Chase has agreed to pay \$20 billion to settle government legal claims related to financial misconduct.²⁵ A single US government agency, the Department of Justice, collected more than \$23 billion in civil and criminal cases in a single year.²⁶ As one article explains, "[i]t is now almost routine for the Justice Department to collect billions of dollars in civil or criminal fines and penalties in a single

²⁰ Svetlana Starykh & Stefan Boettrich, *Recent Trends in Securities Class Action Litigation: 2015 Full-Year Review*, NERA ECONOMIC CONSULTING: INSIGHT IN ECONOMICS (2016),

http://www.nera.com/content/dam/nera/publications/2016/2015_Securities_Trends_Report_NERA.pdf.

²¹ MUKESH BAJAJ ET AL., U.S. CHAMBER INST. FOR LEGAL REFORM, ECONOMIC CONSEQUENCES: THE REAL COSTS OF U.S. SECURITIES CLASS ACTION LITIGATION 10 (Feb. 2014),

http://www.instituteforlegalreform.com/uploads/sites/1/EconomicConsequences_Web.pdf.

²² STEVEN GARBER, RAND CORPORATION, ECONOMIC EFFECTS OF PRODUCT LIABILITY AND OTHER LITIGATION INVOLVING THE SAFETY AND EFFECTIVENESS OF PHARMACEUTICALS xiii (2014),

<http://www.rand.org/pubs/monographs/MG1259.html>.

²³ A. Mitchell Polinsky & Steven Shavell, *The Uneasy Case for Product Liability*, 123 HARV. L. REV. 1431, 1488-89 (2010).

²⁴ Robert C. Bird, *Developing Nations and the Compulsory License: Maximizing Essential Medicines While Minimizing Investment Side Effects*, 37 J.L. MED & ETHICS 209, 211-12 (2009).

²⁵ Robert Mclean & Irene Chapple, *BP Settles Final Gulf Oil Spill Claims for \$20 Billion*, CNN, Oct. 6, 2015, <http://money.cnn.com/2015/10/06/news/companies/deepwater-horizon-bp-settlement>; Peter Eavis, *Steep Penalties Taken in Stride by JPMorgan Chase*, N.Y. TIMES, Jan. 7, 2014, <http://dealbook.nytimes.com/2014/01/07/steep-penalties-taken-in-stride-by-jpmorgan-chase>.

²⁶ Press Release, U.S. Department of Justice, Justice Department Collects More Than \$23 Billion in Civil and Criminal Cases in Fiscal Year 2015, (Dec. 3, 2015), <https://www.justice.gov/opa/pr/justice-department-collects-more-23-billion-civil-and-criminal-cases-fiscal-year-2015>.

case.”²⁷ Government induced volatility, whether induced by the firm’s own misconduct or otherwise, can dramatically impact an organization’s bottom line.

Legal volatility is most effectively addressed through enhancing firm agility. Agility is “the capacity for resisting, absorbing and responding, even reinventing if required, in response to fast and/or disruptive change that cannot be avoided.”²⁸ The agile firm can react with creative and mindful responses even when external pressures demand immediate action. Agile firms are evocative of the Velcro organization, a concept describing firms able to seamlessly reconfigure and deploy assets in response to even radical change.²⁹ Agility enables firms to identify and capture business opportunities that would otherwise be unavailable to rivals.³⁰ Agility also requires resources, requiring agility to be delivered cost-effectively and in harmony with a firm’s overall strategy.³¹ Agility must also be fluid and quickly deployable in order to prevent the firm from losing control of the rapidly evolving situation.³²

For agile firms, legal volatility is an opportunity for innovation. First, firms can **pursue lean absorption** of volatility as part of the cost of doing business. Lean absorption is not a passive response, nor is it mere acquiescence. Absorption involves skillfully investing in excess human or capital reserves through stockpiling assets or overbuying talent in anticipation of the volatile event. Agile firms deliberately build slack in the organizational system for the “long winter” that volatile environments bring.³³ The value opportunity in absorption rests in an absorption strategy that allocates slack resources more efficiently than rivals. Just as lean manufacturing systematically eliminates waste from production system, so lean absorption through analytics, active preparation, and cross-functional collaboration can increase the efficiency of responses to volatility when the difficult conditions appear.

Legal resources can be efficiently stockpiled for lean absorption. In house legal departments should retain specialists in a field in which volatility is most likely expected. Firms can also maintain legal defense funds that account for the likelihood of litigation as well as the chances of success. These reserves are driven by hard calculations of vulnerability as well as monitoring litigation-related activity throughout the industry.³⁴ Firms can also invest in capital in anticipation of regulatory volatility. For example, investments in pollution controls ahead of expected environmental regulation can be introduced gradually, more thoroughly, and at a lower cost than a sudden and last minute response to a new rule. This also gives time for employees to prepare for sudden regulatory changes and offers a margin of error above the regulatory

²⁷ Michael P. Kelly & Ruth E. Mandelbaum, *Are the Yates Memorandum and the Federal Judiciary’s Concerns about Over-Criminalization Destined to Collide?* 53 AM. CRIM. L. REV. 899, 902 (2016).

²⁸ Ian Reid et al., *A Framework for Operational Agility: How SMEs Are Evaluating Their Supply Chain Integration*, in MANAGING IN A VUCA WORLD, *supra* note 15, at 151, 153.

²⁹ Joseph L. Bower, *Building the Velcro Organization: Creating Value Through Integration and Maintaining Organization-Wide Efficiency*, IVEY BUS. J. ONLINE, Nov.-Dec. 2003, at 1, 2. *See generally* C.K. Prahalad & Venkatram Ramaswamy, *Co-opting Customer Competence*, HARV. BUS. REV., Jan.-Feb. 2000, at 79 (presenting an example of firm agility via incorporation of customers as co-creators of value).

³⁰ Donald Sull, *How to Thrive in Turbulent Markets*, HARV. BUS. REV., Feb. 2009, at 78, 81-82.

³¹ David Teece et al., *Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy*, 58 CAL. MGMT. REV. 13, 31 (2016).

³² Marianne W. Lewis et al., *Paradoxical Leadership to Enable Strategic Agility*, 56 CAL. MGMT. REV. 58, 60-61 (2014).

³³ Bennett & Lemoine, *supra* note 19, at 314.

³⁴ Emily Flitter, *In Wake of JPMorgan Settlement, Big Banks Add to Defense Funds*, REUTERS, Jan. 17, 2014, <http://www.reuters.com/article/us-usa-banks-reserves-idUSBREA0G1PN20140117>.

minima.³⁵ Such a graduated investment strategy driven by conserving resources allows a firm to adjust to a regulatory change with lower financial and organizational costs than its less legally knowledgeable rivals.

Second, firms can **develop rapid response plans** in order to apply stockpiled resources effectively. Executives must have a crisis management team that defines membership on the team, individual roles, and emergency flows of information. For legal crises, the Chief Legal Officer (CLO) in partnership with the CEO and other executives should plan for quick collaboration with public relations, specialized outside counsel, and relevant business units. Firms can assign emergency roles to legal personnel that supersede ordinary obligations when an unexpected threat faces the enterprise. Externally, companies can retain law firms with rapid response teams offering immediate access to counsel. Global law firm DLA Piper, for example, offers a rapid response app and hotline to its clients, available at any time of day or night, which gives immediate access to crisis management lawyers and communications specialists.³⁶ Legal crisis management firms offer engagement with media to manage instability in response to shock events. Lawyers playing a prominent role in crisis situations can qualify information for special disclosure protection under attorney-client privilege.³⁷

Finally, firms can **anticipate legal opportunities** created by volatility and outflank other firms. Firms that monitor legal institutions and political trends can exploit regulatory innovations that open up new markets. When India strengthened its product-patent law in 2005, it eroded the entrenchment of generics manufacturers and enabled quick-moving patent holders to penetrate the market ahead of rivals.³⁸ This in turn granted market exclusivity which can encourage investment in innovation of new products for that market.³⁹ Preparation by hotel giant Starwood Hotels and Resorts Worldwide enabled it to quickly leverage relaxation of US embargo regulations by government officials, enabling it to be the first hotel chain to be authorized to operate in the Cuban market.⁴⁰ Prepared responses to legal volatility can thus offer access to new markets arising from rapid deregulation or new legal protections generated by institutions.

II. Overcome Legal Uncertainty by Coordinating Legal and Business Functions

The capacity of a firm to innovate is based upon its internal environment and the capacity to acquire and retain new knowledge.⁴¹ Uncertainty in VUCA environments is driven by a lack of knowledge. This lack of knowledge is not tied to the cause or effect of a particular event.

³⁵ See generally Richard L. Revesz & Allison L. Westfahl Kong, *Regulatory Change and Optimal Transition Relief*, 105 N.W. U. L. REV. 1581 (2011) (discussing costs of transition for firms in environments of regulatory change)

³⁶ Press Release, DLA Piper, DLA Piper Launches Rapid Response App (May 6, 2014), <https://www.dlapiper.com/en/scotland/news/2014/05/dla-piper-launches-rapid-response-app>.

³⁷ Xenia Kobylarz, *The Emerging Crisis Management Practice*, LAWDRAGON, Oct. 23, 2013, <http://www.lawdragon.com/2013/10/23/the-emerging-crisis-management-practice>.

³⁸ Ajay Bhaskarabhatla & Chirantan Chatterjee, *First-Mover Advantages Before and After TRIPS: Evidence from the Indian Pharmaceutical Industry* 16 (June 19, 2014), available at <https://ssrn.com/abstract=2154510>.

³⁹ See Michael Abramowicz & John F. Duffy, *Intellectual Property for Market Experimentation*, 83 N.Y.U. L. REV. 337, 354 (2008) (arguing that “increasing the degree of market exclusivity--in effect, providing legal protection to increase the first-mover advantage--can promote social welfare by increasing the number of experiments that private parties are willing to undertake.”).

⁴⁰ Deanna Ting, *Starwood Is First U.S. Hotel Chain to Receive Authorization to Operate in Cuba*, SKIFT, March 19, 2016, <https://skift.com/2016/03/19/starwood-is-first-u-s-hotel-chain-to-receive-authorization-to-operate-in-cuba>.

⁴¹ Michael J. Mol & Julian Birkinshaw, *The Sources of Management Innovation: When Firms Introduce New Management Practices*, 62 J. BUS. RES. 1269, 1270 (2009).

Instead, uncertainty involves a lack of comprehension of whether a factor is significant enough to require a meaningful cause. Uncertainty does not mean ignorance of cause and effect. An uncertain environment instead shrouds the conceptualization of threats and opportunities that surround a given event. Time, distance, or cultural barriers generate uncertainty in decision-making in unfamiliar environments.

Uncertain environments are not necessarily volatile as uncertainty does not necessarily imply sudden or drastic changes. Whereas complex situations are predictable but difficult to understand, uncertain environments are understandable but offer little guidance about the outcome of a given action. When a rival introduces a new product, for example, the causes and effects of how a product arrives and interacts with the market are known. However, the understanding of how that rival product will change the market environment and what response is appropriate remains unclear. A firm facing uncertainty will not be sure whether to respond aggressively to a rival's product with a higher quality equivalent, lower the price of the current model, or ignore the introduction altogether.⁴² Uncertainty is thus a problem caused by information being inaccessible, unknowable, or too costly to obtain.

Uncertainty is inherent in the legal environment of business. Laws are finite sets of rules that must apply to an infinite set of problems. Legislators can only speculate at future events when drafting new legislation and cannot easily predict changes in business or society.⁴³ As a result, new legislation may ineffectively address its stated goal or impose unnecessary burdens. While judges try to be predictable when applying statutes and prior court cases, courts can give varying interpretations of the same law. This makes dispute resolution via the courts laden with uncertainty, as counsel can often give only general estimates as to the likelihood of success of a given lawsuit. The result is a legal environment where uncertainty is a significant factor in firm decision making.

For firms to succeed in an environment of legal uncertainty, firms must first and foremost **dismantle barriers** of communication between businesspeople and legal experts. Because uncertainty is driven by the lack of adequate information, obtaining available knowledge about the legal environment is essential. Legal issues remain a high priority for managers, and consume up to 25% of a CEO's available time.⁴⁴ Yet lawyers and businesspeople don't sufficiently communicate. Managers are often disinterested in legal issues and try to avoid becoming "tangled up" with lawyers.⁴⁵ Managers may also avoid seeking legal advice because of cost concerns. Few managers have extensive legal training, and MBA graduates from many elite business schools can acquire their degree without a single course in business law.⁴⁶ When managers retain counsel, attorneys are too often underutilized as reactive litigators or 'go-fix-it' problem solvers.⁴⁷ As a result, lawyers experience frustration with their business clients, who,

⁴² Bennett & Lemoine, *supra* note 19, at 314-15.

⁴³ Sofia Ranchordás, *Innovation Experimentalism in the Age of the Sharing Economy*, 19 LEWIS & CLARK L. REV. 871, 885 (2015).

⁴⁴ See, e.g., Robert C. Bird, *Law, Strategy, and Competitive Advantage*, 44 CONN L. REV. 61, 64-65 (2011); George J. Siedel, *Six Forces and the Legal Environment of Business: The Relative Value of Business Law among Business School Core Courses*, 37 AM. BUS. L.J. 717 (2000); George J. Siedel et al., *An Executive Appraisal of the Importance of Business Law*, 22 AM. BUS. L.J. 249 (1984).

⁴⁵ G. RICHARD SHELL, MAKE THE RULES OR YOUR RIVALS WILL 9 (2004).

⁴⁶ Constance E. Bagley et al., *Who Let the Lawyer's Out?: Reconstructing the Role of the Chief Legal Officer and the Corporate Client in a Globalizing World*, 18 U. PA. J. BUS. L. 419, 477-79 (2016).

⁴⁷ See Robert L. Nelson & Laura Beth Nielsen, *Cops, Counsel, and Entrepreneurs: Constructing the Role of Inside Counsel in Large Corporations*, 34 LAW & SOC. REV. 457, 463-464 (2000) (describing policing role that some general counsel in large corporations primarily assume).

from their perspective, heedlessly ignore their recommendations, remain willfully ignorant about legal rules, make reckless decisions, and exclude legal experts from key decision-making processes.

Lawyers have their own limitations. Many attorneys receive no business training before counselling clients. Trained to be conservative, lawyers can be averse to risk. Lawyers' advice, while protecting the firm from harm, can discourage implementation of innovative strategies. In-house counsel receive the reputation of being from the "Department of No" or the "Business Prevention Unit," sinking otherwise profitable innovations without due consideration for business consequences.⁴⁸ Lawyers are accused by managers of not listening, fixating on insignificant issues, and failing to engage with business concerns. When lawyers do communicate it is too often in dense legalese that obfuscates rather than clarifies.⁴⁹ It is no surprise then when a survey asks business owners to discuss lawyers, they describe them as authoritative, conservative, arrogant, and intimidating.⁵⁰ Firms must dismantle any attitudinal or structural barriers between lawyer and manager that deter cooperation in order to begin reducing legal uncertainty from the enterprise.

Second, firms can extract value and diminish uncertainty through encouraging **partnered engagement** between business and law. Partnered engagement means the sustained participation of legal knowledge holders into major aspects of the enterprise. Legal experts should be involved early in any major decision-making processes of the firm. Firms considering a merger or acquisition should have plans and disclosure documents reviewed by legal staff. This not only protects against future wrongdoing but preserves attorney-client privilege that can help keep communications confidential.⁵¹ Early consultation with attorneys in new product development can prevent costly late-stage modifications, avoid infringing the patent of another, or reduce exposure to unnecessary risk. The later attorneys are involved, the greater the chance of law-business conflict as cemented business plans are jeopardized by last-minute legal problems. Engaged participation by counsel can clarify uncertainty and inform managers about legal rules before costly investments are undertaken.

Third, lawyer-executives, led by the CLO, must be involved in **core decision-making** of the strategic functions of the firm. Once an underpaid ministerial function, the CLO is now one of the most important positions in the executive suite.⁵² Today, "there has probably never been a time when legal considerations have played such a key role in strategy formulation."⁵³ Although lawyers avoid risk, they tend to be more adept at managing information uncertainty than most professions.⁵⁴

Reducing legal uncertainty requires that top lawyers must be involved as highly-compensated executives who regularly interact with and consult top management. Lawyers bring

⁴⁸ Jeffrey W. Wheeler, *Oh Great, The Lawyer's Here!*, ACC DOCKET, June 2015, at 18.

⁴⁹ Robert C. Bird, *Pathways of Legal Strategy*, 14 STAN. J.L. BUS. & FIN. 1 (2008).

⁵⁰ Milo J. Geyelin, *More Law Schools Are Teaching Students Value of Assuming Clients' Point of View*, WALL. ST. J., Sept. 17, 1991, B1.

⁵¹ Yin Wilczek, *Involve Litigators Early in M&A Deals to Avoid Disclosure Pitfalls, Attorneys Say*, BLOOMBERG BNA, Feb. 27, 2015, <https://www.bna.com/involve-litigators-early-n17179923478/>.

⁵² Carl D. Liggio, *The Changing Role of Corporate Counsel*, 46 EMORY L.J. 1201, 1201 (1997); *A Guardian and A Guide*, THE ECONOMIST, Apr. 7, 2012, <http://www.economist.com/node/21552170>.

⁵³ CONSTANCE E. BAGLEY, WINNING LEGALLY: HOW TO USE THE LAW TO CREATE VALUE, MARSHAL RESOURCES, AND MANAGE RISK 231-32 (2005).

⁵⁴ John Charles Kunich, *The Uncertainty of Life and Death: The Precautionary Principle, Gödel, and the Hotspots Wager*, 17 MICH. ST. J. INT'L L. 1, 29 (2008).

proven knowledge to key firm functions. Firms that utilize highly talented CLOs are associated with superior firm performance and more accurate earnings forecasts.⁵⁵ Elite CLOs also deter insider trading, sensitize firms to litigation risk, and improve corporate governance under times of stress.⁵⁶ Firms that consign their legal experts to anything less than core functions deny themselves critical information and exacerbate uncertainty.

From a VUCA perspective, the most vulnerable managers are those that 'don't know what they don't know' about the legal environment. They make decisions and implement strategies ignorant of the vast uncertainty involved in their actions that could cost their employers needless lawsuits, sanctions, and bad publicity. Even managers who are cognizant of regulations may be resistant due to out-of-date notions of how lawyers work. Lawyers and non-attorney legal staff must be allowed to educate, consult, and strategize. Only when legal knowledge providers are engaged, treated like partners, and participating in core decision-making can a firm get the most out of their legal resources and manage legal uncertainty for the enterprise.

III. Reign in Complexity by Restructuring Operations to Match External Complication

Complexity is the presence of numerous interconnected variables in a given environment. These interconnected variables are difficult to understand by an organization. Information access as well as information density influence the impact of complex information on the enterprise. When complexity must be understood, it drains resources in order to unravel what the information holds. Complexity also confounds decision making. The sheer volume of information in an environment can make reaching informed decisions burdensome as the information may be either difficult to understand or difficult to separate from irrelevant noise.

Complexity is distinct from its uncertain and volatile counterparts. A complex situation does not necessarily involve unstable and unpredictable change that generates volatility. Stockpiling resources, useful for managing volatility, may not help clarify complex environments. Complexity also does not necessarily mean the absence of key information that plagues uncertainty. Gathering more information, useful in reducing uncertainty, may result in an even greater quantity of unhelpful information density in complex environments.

The legal environment of business is fundamentally complex. Laws must guide an infinite combination of simple and complex business transactions with only the power of the written word. Laws must also incentivize or discourage behavior, and must be designed to withstand concerted attempts to circumvent desired results. For example, rules designed to reduce greenhouse gases through trading carbon credits encouraged a cottage industry of manufacturers increasing their production of harmful gases in order to destroy an obscure chemical byproduct that generated lucrative credits tradeable on the open market.⁵⁷ When French government authorities offered a bounty for rat tails to decrease rodent infestation, citizens responded by building rat-breeding farms to collect the bounty.⁵⁸ With legal rules vulnerable to

⁵⁵ See Robert C. Bird et al., *The Role of the Chief Legal Officer in Corporate Governance*, 34 J. CORP. FIN. 1 (2015); Byungjin Kwak et al., *The Composition of Top Management with General Counsel and Voluntary Information Disclosure*, 54 J. ACCT. & ECON. 1 (2012).

⁵⁶ Alan D. Jagolinzer et al., *Corporate Governance and the Information Content of Insider Trades*, 49 J. ACCT. RES. 1249 (2011); Linda Smith Bamber, *What's my Style? The Influence of Top Managers on Voluntary Corporate Financial Disclosure*, 85 ACCT. REV. 1131 (2010). Bird, et al., *supra*, note 55.

⁵⁷ Elisabeth Rosenthal & Andrew W. Lehren, *Profits on Carbon Credits Drive Output of a Harmful Gas*, N.Y. TIMES, Aug. 9, 2012, <http://nyti.ms/O468Un>.

⁵⁸ Michael G. Vann, *Of Rats, Rice, and Race: The Great Hanoi Rat Massacre, an Episode in French Colonial*

exploitation, and private actors continually scanning such rules for weaknesses, regulators respond by creating additional and complicating revisions to prevent the undesirable behavior. One reason why tax laws are so dauntingly complex is because they are so aggressively micro-analyzed by tax professionals seeking loopholes that legislators must continually update laws with new and complex language to close them.⁵⁹

Laws can also be imperfectly written. Laws may be drafted in a carelessly broad fashion that burdens entities that the law was not designed to impact. In order to minimize these unwanted effects, and on occasion to satisfy political interests, laws are given exceptions and conditions that further refine the coverage of the rule to its intended target. The cost of this refinement is that rules become less simple to understand and more difficult to interpret. Rules are thus complex not to keep lawyers employed, but as a natural consequence managing the complexity of human society. Firms can hope that legal simplification efforts gain traction,⁶⁰ but it seems likely that the legal environment of business will become more, and not less, complex over time.

The opportunity for innovation in a complex environment begins with understanding that different types of complexity warrant different responses by the firm. The first type of complexity is convolution. Convolution is complexity that is unnecessary to the functioning of a given system. Convoluted systems are laden with needless imprecision, complication, or misdirection. Business systems can be convoluted if they have been constructed piecemeal and without coordination from system stakeholders. Laws become convoluted because they have not been updated, are poorly drafted, or attempt to regulate too much. Mismanagement of convolution results in the organizational equivalent of a Rube Goldberg machine,⁶¹ an overcomplicated or over-engineered system of managing information driven to produce relatively simple outputs or results.

In order to survive with legal complexity, firms must first **eliminate convolution** from their legal environment. One of the most common sources of convolution is legal jargon. A useful shortcut for attorneys, legal jargon generates convolution by obscuring communication, frustrating non-expert readers, and preventing managers from making optimal decisions with provided information.⁶² Jargon can unnecessarily complicate firm processes in contract management, human resources, and other fields by generating a system that requires needless extra steps in order to ensure appropriate rules are followed. Legal experts must remove jargon before distributing information to internal stakeholders.

Legal complexity can also arise from internal policies implemented by the enterprise. Legal staff interpreting and applying rules can inadvertently create policies that become more complex and burdensome than the law itself. Policy modifications may be carelessly layered onto prior rules and create a labyrinth of inefficiently expressed mandates. Policies may also

History, 4 FRENCH COLONIAL HIST. 191, 197-98 (2003).

⁵⁹ Gerrard L. Grant, *The Aftermath of a King Renouncing His Citizenship: A Closer Look at Recent Trends of Corporate Inversions in America*, 16 J. BUS. & SEC. LAW. 111, 132-34 (2015); William J. Rands, *Corporate Tax: The Agony and the Ecstasy*, 83 NEB. L. REV. 39, 47 (2004).

⁶⁰ See generally Peter H. Schuck, *Legal Complexity: Some Causes, Consequences, and Cures*, 42 DUKE L.J. 1 (1992) (describing the costs of legal complexity and subsequent behavioral responses).

⁶¹ Rube Goldberg was a twentieth-century American cartoonist famous for designing humorous and over engineered machines that laboriously complete a simple task. See PETER C. MARZIO, RUBE GOLDBERG: HIS LIFE AND WORK (1973).

⁶² Terrill Pollman, *Building a Tower of Babel or Building a Discipline? Talking About Legal Writing*, 85 MARQ. L. REV. 887, 914-17 (2002).

become fragmented across departments and business units. If managers in different functions are not aware of one another's internal rule constraints, actions can be unnecessarily duplicative. Company policies can be almost as important as formal regulations, and mismanagement of those policies can drive convoluted and reduce innovation.

Once convoluted has been eliminated, or at least tolerably subdued, firms must **manage intricacy**, the second type of complexity. An intricate environment is one that is complex because there are complicated processes and variables that are inseparable from that environment. Like the human brain or quantum physics, intricate systems must be complex in order to successfully function. Diluting or reducing a complex system below its inherent intricacy omits important information, exposes a firm to needless risk, and impairs the decision making of managers who rely on that information to function.

Intricacy can be managed by utilizing legal expertise to remove barriers to accessing and understanding information. Firms can rely on legal information systems to increase search and retrieval speed, but experts who understand the firm's business are necessary to translate and disseminate that information to a non-legal audience. Lawyers and their staff must first determine what information is most useful to which stakeholder. This requires a legal team that understands the operations of the business as well as the managers directly responsible for a particular function. This team must then be able to disseminate customized legal briefings horizontally across business units in the enterprise according to particular need. A transportation manager, for example, may not need to understand the nuances of recent banking reforms. Engineers more than other professions may need detailed information on patent law. Accountants will want to pay special attention to financial reporting and disclosure rules. Each discipline should receive its own unique 'legal mix' of information from which it can easily interpret, respond, and strategize.⁶³

In addition to horizontal dissemination, the legal department must adapt legal knowledge vertically according to the relevant needs of the audience. Executives, managers, and rank-and-file workers will require different levels of detail for their respective tasks. Offering oversimplified information denies the recipients needed expertise. Offering information that is too complex generates convoluted and slows the decision making process. The legal department should disseminate the right information for the right audience at the right level of complexity.

Finally, reducing information complexity requires a firm to **restructure operations**. Restructuring legal operations means embedding legal rules into the core functioning of the organization. In this way the enterprise aligns itself with the external complexity to which it must adapt. Such alignment can be accomplished on an *ad hoc* basis, but is most effective when part of a firm-wide system of compliance serving the organization. Compliance is not just about following rules, but building a system of practices, and processes that systematize and operationalize legal requirements throughout the organization. Compliance is also about implementing and monitoring the system put in place, ensuring the distribution of adequate regulatory information to affected managers, and auditing the program should deviations from standards arise. Foundational to a successful compliance system is building a culture of integrity, whereby each employee takes ownership of her own regulatory responsibilities and acts in alignment with the norms and values of the enterprise. An effective compliance program removes the shroud of uncertainty from legal rules, thereby enabling employees to confidently comprehend and satisfy regulatory standards.

⁶³ Cf. Bird, *supra* note 38, at 74 ("Each company has its own unique "legal mix" of regulatory issues that it must face.").

When companies deprioritize restructuring their firm via a compliance program to harmonize with legal rules, they do so at their peril. When Volkswagen was cited for manipulating auto emissions data through a software defeat device, its lack of a compliance program and a compliance culture caught the multinational largely unprepared to respond to the social and political firestorm that followed. Unable to sufficiently manage the VUCA challenges before it, initial responses appeared hesitant and evasive, allowing public opinion to cement against the enterprise and increased pressure on regulators to demand large penalties against the company. The worldwide auto company has been forced to set aside at least \$17.9 billion for scandal-related costs.⁶⁴

Reducing complexity successfully requires coordination and planning. Legal and compliance staff must work together to develop compliance systems. Legal staff can provide the regulatory expertise while compliance staff implement the systems and monitoring to ensure its implementation. Both legal and compliance disciplines must share responsibility for reductions in uncertainty to be successful. Other interests must also be engaged such as risk management, audit, and even outside regulators in order to ensure that compliance obligations are meeting the expectations of internal and external stakeholders.

IV. Manage Ambiguity through Controlled Experimentation

Ambiguity is the most difficult to manage of the four environments because so little is understood by the firm. Relationships between cause and effect are unclear. Limited historical precedent exists for guiding a certain cause of action. To the extent a right answer to a problem exists, it is either impossible to find or multiple options appear equally valid. Established methods of strategy and planning fail in environments of ambiguity because of the absence of information. An ambiguous environment thus creates a perfect and unfortunate storm of instability for the enterprise.⁶⁵

Tactics useful in other VUCA environments do not work in an ambiguous one. Stockpiling resources and generating slack, a useful protection against volatility, is not helpful because firms do not know the eventuality against which resources should be preserved. Obtaining and disseminating knowledge in an uncertain environment has limited usefulness because available information about the situation is unavailable. Restructuring the enterprise, useful for reducing complexity, is not practical because the firm is not aware of the conditions that the firm is restructuring against. Ambiguity thus requires a response all its own.

What makes the legal environment of business so challenging to understand, and so essential to master, is that legal ambiguity is persistent and growing in light of innovative disruption. In modern environments, especially competitive environments with technological and market dynamism and limited regulation, business innovation proceeds at a rapid pace.⁶⁶ Innovation in markets grows not by central planning, but through the spontaneous and unrestrained actions of many thousands of entrepreneurs. The sheer inventiveness of both entrepreneurial and established firms threaten to shake-up established business models. Business paradigms once developed and utilized over years now remain cutting edge only in brief slices of

⁶⁴ Jack Ewing, *For Volkswagen Chief, Toll of the Emissions Scandal Rises*, N.Y. TIMES, July 20, 2016, <http://nyti.ms/2ag2VD9>.

⁶⁵ Bennett & Lemoine, *supra* note 19, at 16; Mack & Khare, *supra* note 18, at 6.

⁶⁶ See Eric H. Kessler & Alok K. Chakrabarti, *Innovation Speed: A Conceptual Model of Context, Antecedents, and Outcomes*, 21 ACAD. MGMT. REV. 1143 (1996).

time. The result is a powerful but chaotic environment where disruption is the norm rather than the exception.

This disruptive environment imposes upon the legal system a nearly impossible task – to understand, evaluate, and regulate new technologies and innovations at the speed of the market. Legislators and courts evaluate and disseminate rules using legal institutions that are centuries old and look largely to the past for guidance and consistency. While such a system serves key accountability and transparency functions,⁶⁷ it does so at a cost of trailing business innovation. The legal environment can thus rarely predict and regulate disruptive innovation before it occurs. Governments will be forced to observe and react, with a persistent lag between an innovation and the regulatory tools that control excesses, ensure fair markets, and protect societal interests. If regulators themselves cannot predict the rules of commerce in an emerging paradigm, it is difficult for firms to anticipate how regulators will respond to control that paradigm. This leaves a firm with little guidance regarding potential legal exposure in an ambiguous business environment.

Firms cannot respond to this difficulty by withdrawing from ambiguous legal environments. This would cede new and potentially lucrative opportunities to competitors. Instead, firms must engage in experimentation in the ambiguous market. Experimentation requires the firm to try new strategies, process feedback from those strategies, and adjust subsequent plans according to the feedback received. This experimentation must occur with the knowledge that it places the firm at risk for a future and unknowable legal liability. An experimentation strategy is counterintuitive because it contradicts firm impulses to eliminate legal risk. When exposed to legal ambiguity, firms tend to overreact and assume unnecessarily precarious regulatory conditions. This in turn ties up more resources than necessary to eliminate potential liability exposure. When regulators increased oversight of company directors, board members responded with excessive conservatism that impaired the firm's long-term effectiveness.⁶⁸ One extreme example estimated that the adoption of a new employment law protecting employees from certain types of discharge invoked a defensive response from firms up to 100 times larger than the actual exposure of the rule.⁶⁹ Various forces driving overreaction could be at work, including the innate conservatism of attorneys, the inclination of the popular press to exaggerate legal liability, or managers' inherent aversion to legal problems.⁷⁰ Regardless of the source, a firm wanting to engage legal ambiguity productively must resist the strong and justifiable desire to insulate itself from all legal risk.

This does not mean, however, that a firm facing an ambiguous legal environment should heedlessly expose itself to liability. Firms must display mastery of three abilities in order to optimize their success in ambiguous environments. First, firms must **develop risk intelligence** in their decision making. Risk intelligence involves not simply viewing risk from the perspective of mitigation and avoidance, but rather understanding risk as a vehicle for value creation. Risk intelligence requires an understanding of the spectrum of risks in a decision, developing a process of risk management at key stages of decision making, and disseminating risk

⁶⁷ See generally Jennifer Shkabatur, *Transparency With(out) Accountability: Open Government in the United States*, 31 YALE L. & POL'Y REV. 79 (2012) (describing role of transparency and accountability in the regulatory context)

⁶⁸ Michael W. Peregrine, Caution by Company Officers Can Create Problems for Boards, N.Y. TIMES, Dec. 22, 2015, <http://nyti.ms/1YvboET>.

⁶⁹ JAMES N. DERTOUZOS & LYNN A. KAROLY, RAND CORPORATION, LABOR-MARKET RESPONSES TO EMPLOYER LIABILITY xiii (1992), <https://www.rand.org/content/dam/rand/pubs/reports/2007/R3989.pdf>.

⁷⁰ See Bird, *supra* note 44, at 84.

management principles into the broader culture of the organization.⁷¹ Risk intelligence also demands decision making that is sensitive to risk relative to its return. While risk aggression exposes the firm to needless liability, risk aversion leaves potentially valuable resources untapped. Firms willing to engage legal ambiguity must be able to walk a fine line between deliberate risk exposure and unnecessary legal liability.

Second, the enterprise must **master legal astuteness**. Legal astuteness is not just legal knowledge, but the capability of making legal knowledge a source of strategy that can capture value, reduce costs, and manage risk.⁷² Executives that are legally astute place legal knowledge at the core of strategic planning and ably convert challenges into opportunities. For example, in the 1990s Deloitte & Touche used its legal astuteness to transform accusations of gender discrimination into an opportunity to promote gender equity that reduced turnover, improved recruitment, and helped generate thirty percent growth for that year.⁷³ Once ailing IBM used its legal astuteness to leverage a large portfolio of intellectual property rights into a billion dollar source of value. IBM's patent licensing division became so successful that it generated a new and profitable business line for IBM consulting with firms on how best to manage their patent portfolios.⁷⁴ Investing limited resources in environments where legal ambiguity reigns requires an astute understanding of a firm's legal resources.

Experimentation has little value if the firm is unable to develop from the experience. As a result, for a firm to adapt to legal ambiguity it must **build a learning organization**. A learning organization is where employees "continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together."⁷⁵ Learning organizations have employees that value tolerance and promote holistic thinking. Learning organizations also have an enhanced toleration for unpredictable and ambiguous events, and can adapt quickly to opaque circumstances.⁷⁶ When learning organizations encounter ambiguity, they learn from their successes and mistakes better than their competitors. Firms retain information from the event, process that information for future implications, and distribute that learning across the organization. For example, a legal threat such as a lawsuit or sanction can provoke a defensive turtling posture against a seemingly hostile or unfair legal system. That same event can also invigorate an enterprise to improve its thinking about the legal environment and redesign processes to better adapt to future legal ambiguity. The difference between such viewpoints can be the result of whether the enterprise is a learning organization.

Organizations that fail to manage legal ambiguity do so at their peril. Uber is the leading provider in the real-time rideshare industry, using smartphones and GPS navigation to connect Uber passengers with drivers. Uber requires that drivers supply their own cars and licenses while Uber calculates fares and sends payments to the driver. Innovators like Uber radically

⁷¹ DELOITTE, THE RISK INTELLIGENT ENTERPRISE: ERM DONE RIGHT 4 (2013), <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Governance-Risk-Compliance/dttl-grc-riskintelligent-erm-doneright.pdf>.

⁷² Bagley, *supra* note 17, at 378.

⁷³ Susan Sturm, *Second Generation Employment Discrimination: A Structural Approach*, 101 COLUM. L. REV. 458, 492-99 (2001).

⁷⁴ Kevin G. Rivette & David Kline, *Discovering New Value in Intellectual Property*, HARV. BUS. REV., Jan.-Feb. 2000, at 54, 55-56.

⁷⁵ PETER M. SENGE, THE FIFTH DISCIPLINE: THE ART & PRACTICE OF THE LEARNING ORGANIZATION 3 (2006).

⁷⁶ David A. Garvin et al., *Is Yours a Learning Organization?*, HARV. BUS. REV., Mar. 2008, at 109.

transformed the personal transportation market by giving riders real time access to transportation and drivers substantial flexibility to choose markets and working hours.

As can happen with transformative innovations, Uber faced a legally ambiguous environment. Legislators had yet to consider what would be permissible in a rideshare industry. Courts had issued no legal decisions directly applicable to Uber's business model. Local officials had little warning that Uber would be so dominant and pervasive in the jurisdictions under their responsibility. In spite of this legal black box, Uber raced ahead. Seemingly heedless of the uncharted road ahead, Uber followed an 'act first and ask permission later' model. This may have been because of entrepreneurial hubris or the belief that strong consumer demand would leverage pressure against government officials to give Uber an unprecedented free hand.

What Uber encountered instead was a wave of unnecessary legal problems. Lawsuits against Uber allege that it violated the Americans with Disabilities Act by not providing transportation for mobility impaired customers. A taxi association in Seattle has sued Uber alleging unfair and deceptive business practices.⁷⁷ When a six-year old was killed by a distracted Uber driver looking at his cell phone for his next ride, Uber denied legal responsibility and faced wrongful death litigation.⁷⁸ Uber has been sued for violating antitrust laws for colluding with drivers to raise prices. Two women are suing Uber for fraud and punitive damages after alleging sexual assaults by Uber drivers. Uber drivers in Austin, Texas, are suing for back pay and benefits after Uber's abrupt termination of service in the city.⁷⁹ When Uber classified drivers to save costs, it was met with a \$100 million class action lawsuit from Massachusetts and California drivers that it was recently forced to settle.⁸⁰ Government officials have ramped up litigation against Uber for deliberately ignoring local regulations and providing insufficient background checks.⁸¹ In the US alone there are no less than 70 active lawsuits against Uber in US federal court with presumably many more in state courts, and similar legal challenges against Uber appearing in India, New Zealand, and elsewhere around the world.⁸² While Uber remains a profitable enterprise, many of these problems could have been minimized if it had managed legal ambiguity more effectively.

V. Conclusion

There are few more impactful external forces on a firm than the legal environment of business. Firms must navigate complex and ever changing rules in order to survive. Failure to do so can expose a firm to significant sanction and its managers to fines and even imprisonment. Fortunately, legal VUCA represents an opportunity for value creation for firms willing to understand how legal forces work. Firms can respond to legal volatility with careful conservation of resources and an agile organization that adjusts quickly to rapid shifts in legal rules. Legal

⁷⁷ Anna Gallegos, *The Four Biggest Legal Problems Facing Uber, Lyft and Other Ridesharing Services*, LXBN, June 4, 2014, <http://www.lxbn.com/2014/06/04/top-legal-problems-facing-uber-lyft-ridesharing-services>.

⁷⁸ Joe Fitzgerald Rodriguez, *Uber Sues Wrongful Death Lawsuit of Sofia Liu*, S.F. EXAMINER, July 14, 2015, <http://www.sfexaminer.com/uber-tentatively-settles-wrongful-death-lawsuit-of-sofia-liu>.

⁷⁹ Heather Kelly, *Uber's Never-Ending Stream of Lawsuits*, CNN, Aug. 11, 2016, <http://money.cnn.com/2016/08/11/technology/uber-lawsuits>.

⁸⁰ Rich McCormick, *Uber Settles Lawsuits to Keep Drivers as Independent Contractors in California and Massachusetts*, THE VERGE, Apr. 21, 2016, <http://www.theverge.com/2016/4/21/11485424/uber-suit-california-massachusetts-drivers-employee-contractor>.

⁸¹ See Kelly, *supra* note 79.

⁸² *Id.*

uncertainty may be overcome by harmonizing the legal function with relevant business units, promoting engagement, and building decision-making partnerships at the executive level. Firms can control legal complexity by minimizing convoluted processes and managing intricacy through efficient and tailored dissemination of information to internal stakeholders. Legal ambiguity, the most invidious business environment, demands a strategy of careful experimentation whereby firms master their legal environment and learn from their mistakes and successes. Managing innovation in an uncertain world is a daunting task. The legal environment represents a powerful example of an unstable force. Firms that embrace legal VUCA, rather than avoid it, can use their legal resources to capture value, manage risk, and promote innovation.

Exhibit 1: Managing VUCA in the Legal Environment of Business

Legal VUCA	Definition	Sources of Legal Instability	Organization Response	Value Creation Strategy
Volatility	Volatility is an environment where change is unexpected, unstable, and of unknown duration. Forces in volatile conditions tend to fluctuate sharply and without warning.	Threat of private litigation; government enforcement of legal rules; sudden legislative enactments and judicial rulings.	Train agility to react with creatively and decisively when even when external pressures demand immediate action.	1) Build lean absorption through stockpiling of resources, 2) establish rapid response plans to deploy legal resources, 3) leverage preparation for legal volatility to outflank firms and gain first-mover advantage.
Uncertainty	Uncertainty is driven by a lack of knowledge. This lack of knowledge is not of the cause or effect of a particular event, but rather whether an event is significant enough to require a meaningful response.	Finite rules tasked with regulating an infinite set of problems; courts giving conflicting interpretations of the same rule; government agency discretion encourages varying applications of regulations.	Obtain knowledge about the legal environment that is shareable across functional units and is integrated into decision-making processes.	1) Dismantle barriers between lawyers and businesspeople, 2) foster partnered engagement between business and legal departments, and 3) involve key legal executives to improve core decision-making functions.
Complexity	Complexity is the presence of numerous interconnected parts and variables in a given environment that are difficult to process by an organization and as a result drain resources and confound decision making.	Necessity of legal rules to apply to complex transactions and withstand circumvention; imperfectly written rules generate unnecessary complexity; refinement of rules to increase fairness also increase complexity.	Restructure intra-organizational legal structures to align the firm with irreducible complexity of the legal environment.	1) Eliminate convolution of legal rules, 2) manage irreducible intricacy in order to optimize utility for decision making, and 3) restructure operations to align legal rules with business processes through a system of compliance.
Ambiguity	Ambiguity arises when relationships between cause and effect are largely unclear, weak historical precedent exists for a decision, and consequences are largely indeterminate.	Rapid changes in technology; accelerating growth in innovation; limited ability of government officials to anticipate and regulate in advance of new ideas.	Experimentation requires trying new strategies, processing feedback, and adjusting subsequent plans according to the feedback received. Firms must be comfortable with accepting legal risk.	1) Pursue risk-intelligent decision-making toward legal rules, 2) acquire and retain legal astuteness, and 3) develop a learning organization that can process and improve upon legal experimentation in order to thrive in ambiguous markets ahead of competitors.

