NEW YORK UNIVERSITY JOURNAL OF LAW & BUSINESS

VOLUME 11 FALL 2014 NUMBER 2

LEAN LAW COMPLIANCE: CONFRONTING AND OVERCOMING LEGAL UNCERTAINTY IN BUSINESS ENTERPRISES AND OTHER COMPLEX ORGANIZATIONS

RICHARD S. GRUNER*†

"With every mistake we must surely be learning . . . "1

Law compliance in large organizations is frequently plagued by uncertainty. Corporate employees bound by complex, changing, and often vague legal requirements must choose actions (or manage actions of others) to achieve desirable legal results. Steps taken to promote corporate law compliance reflect rational choices about probably helpful means to avoid adverse legal consequences. Yet, legal uncertainties create a decision-making fog that precludes accurate prediction of how best to make these choices and to proceed lawfully. In this fog, corporate actors (or managers of actors) may see few rationally defined paths towards law compliance. They may be correspondingly hesitant to commit extensive resources to law compliance programs,

^{*} Copyright © 2014 by Richard S. Gruner. Emeritus Professor of Law, The John Marshall Law School in Chicago; PhD, Criminology, Law and Society, 2008, University of California, Irvine; LL.M., 1982, Columbia Law School; J.D., 1978, University of Southern California Law School; B.S., 1975, California Institute of Technology.

[†] Professor Gruner served as a member of the United States Sentencing Commission's Advisory Group on the Organizational Sentencing Guidelines whose recommendations for changes in corporate sentencing standards and evaluation criteria for law compliance programs formed the basis for new federal sentencing guidelines approved by the Sentencing Commission in 2004. Professor Gruner is a member of the New York and California state bars, the author of Corporate Criminal Liability and Prevention (2004), and co-author with Louis Brown and Anne Kandel of The Legal Audit: Corporate Internal Investigation (1990).

^{1.} The Beatles, While My Guitar Gently Weeps (Apple Records 1968).

fearing that poorly targeted compliance efforts will simply waste scarce corporate resources.

Effective compliance practices amidst the fog of legal uncertainty will frequently be hidden as companies and individuals attempt to comply with ambiguously written laws, extensive (and often largely untested) regulations, shifting law enforcement priorities and practices, and rapidly changing company or individual activities affecting corporate liability. Law compliance in these corporate environments—and in any other settings dominated by high legal uncertainty—involves challenges that cannot be overcome by simple predictions of actions needed for compliance coupled with control of corporate personnel to ensure that they take those actions. This sort of command and control approach is effective in more predictable circumstances, but doomed to frequent failures amidst legal uncertainties. Rather, paths towards corporate law compliance amidst legal uncertainty must be found and confirmed thorough learning processes. Corporate actions to follow these paths and achieve effective law compliance must be constructed and perfected through further learning processes.

This Article describes a new approach—lean compliance management—for responding to legal uncertainties and promoting law compliance amidst high legal uncertainty. Emphasizing validated learning of effective compliance methods, the techniques described here are based on principles derived from recent performance management experience gained in startup companies. Lean compliance management provides for the development of successful compliance practices through constant innovation and testing of compliance measures. Through validated learning about what does and doesn't work in advancing law compliance, companies can tailor compliance practices to their particular circumstances and reduce associated uncertainties about achieving law compliance.

Lean law compliance has both public and private significance. For the public, lean compliance ensures that companies are more effective in complying with applicable laws and protecting public interests advanced by those laws. For private companies, lean compliance avoids two types of waste: costs due to penalties for avoidable illegal conduct and lost resources devoted to useless compliance practices. Absent the type of validated learning embedded in lean compliance methods, companies run the risk of both paying penalties for preventable incidents of illegal conduct and, at the same time, expending resources uselessly on failed compliance practices. Beyond threatening corporate profits and business survival, wasteful expenditures on ineffective compliance practices may actually increase misconduct levels by creating false (and unjustifiably reassuring) facades of compliance success that divert concern of company managers from preventing or halting real compliance problems. This Article explains why corporate executives and compliance specialists should look to lean compliance methodologies for reliable means to construct effective compliance programs despite the need to achieve law compliance amidst high legal uncertainty. It also describes how lean compliance criteria should be incorporated in legal standards governing criminal and civil liability for corporations and other organizational actors.

I.		FION	2! 2!	
	A.	Why Compliance Practices Must Respond to Legal	O.	
	D	Uncertainty	2!	
	В.	The Boundaries of Rationality and Business		
		Planning for Law Compliance: How Legal		
		Uncertainty Leads to Legal Planning Frustration	2	
TT	Dre	and Acceptance of Liability	2	
II.		SECTING LEGAL UNCERTAINTY		
	A.	Characteristics of Legal Uncertainty	2	
		1. Planning Gaps Due to Complexity of	0	
		Compliance Environments	2	
		2. Planning Gaps Due to Changing	0	
		Environments	2	
		3. Planning Gaps Due to Imperfect Perception of	0	
		Legal Requirements	2	
		4. Planning Gaps Due to Difficulties in	0	
	ъ	Operationalizing Legal Requirements	2	
	В.	Multi-Layered Sources of Legal Uncertainty: An	0	
		Illustration Drawn from Federal Securities Law	2	
		1. Uncertainties Stemming from Substantive	0	
		Requirements	2	
		a. Ambiguity in the Root Statute:	_	
		Deceptive Brevity and Simplicity	2	
		b. Implementing Regulations: Some		
		Clarifications but with Some		
		Fundamental New Ambiguities and	0	
		Uncertainty	2	
		c. Regulatory Rulings: The SEC		
		Resolves Its Own Ambiguities Case	0	
		by Case	2	
		d. Judicial Analyses Fill Gaps but with	0	
		New Complexity	2	
		e. Changes in Base Standards over	_	
		Time Inject New Uncertainties	2	
		2. Uncertainties Stemming from Imperfect	_	
		Employee Direction Inside Companies	2	
		a. Uncertainty in Directing Personnel	_	
		to Comply with Requirements	2	
		b. Uncertainty in Motivating Personnel	_	
		to Comply with Requirements	2	

LEAN LAW COMPLIANCE

249

2014]

		3.	Un	certainties Due to Varying Business	
				essures Promoting Illegal Conduct	269
	C.	Ma	inag	ing Legal Uncertainties as Corporate	
				ance Uncertainties	271
III.	BA			CIPLES OF LEAN MANAGEMENT	273
	A.	Lea	arnir	ng to Overcome Uncertainty	273
	В.	Th	e Cer	ntral Role of Learning Processes	275
	C.	Ter	ntati	ve Commitments to Actions Pending	
		Tes	sting		276
	D.	Dif	feren	aces from Traditional Management in	
		La	rge (Companies	277
	E.	For	unda	tional Principles of Lean Management	278
IV.	RE			G TO LEGAL UNCERTAINTY: UPDATING	
	Co	MPL	IANC	E PRACTICES WITH LEAN LAW	
	Co	MPL	IANC	Œ	279
V.	Co	NST	RUCI	TING COMPLIANCE PROGRAMS	
	Inc	CORF	ORA	TING LEAN MANAGEMENT	286
	A.	Va	lidat	ed Learning in Lean Compliance	
		Ma	inag	ement	286
	В.	Ele	ment	ts of Lean Compliance Programs	288
		1.	Ob_j	jectives of Lean Compliance	288
		2.	Lec	an Compliance Cycles	289
			a.	Where to Apply Lean Compliance	
				Methods	289
			b.	Features of a Lean Compliance	
				Cycle	289
		3.	Lea	an Compliance Step 1: Build	291
			a.	What to Build: Focusing on	
				Compliance Value	292
			b.	Working with Many Small	
				Alternatives	294
			c.	Deploying Iteratively and	
				Experimentally	296
			d.	Deploying Changes Frequently	297
			e.	Deploying Competing Alternatives	
				with Parallel Testing	298
			f.	Incorporating Metrics and	
				Measurable Features	298
			g.	Use Lean Compliance to Shape	
				Seven Key Compliance Program	
				Elements	300
		4.	Lec	an Compliance Step 2: Test	302

2014]	LEAN LAW COMPLIANCE	251						
	a. Testing Basics	302						
	b. Risks of Testing Gaps	303						
	c. Sources of Testing Metrics	304						
	d. Errors in Choosing Metrics	306						
	5. Lean Compliance Step 3: Learn	307						
	a. Features of Validated Compliance							
	Learning	307						
	b. Learning Targets	308						
	c. Structuring Incremental Learning	309						
	d. Adjusting Learning Intensity to Risk							
	Significance	309						
	6. Lean Compliance Step 4: Revise	310						
	a. Revisions Are Both the End and the							
	Beginning of Lean Compliance	010						
	Cycles	310						
	b. Deciding Whether to Persevere or	011						
171	Pivot	311						
VI.	INCORPORATING LEAN LAW COMPLIANCE IN LEGAL							
	STANDARDS							
	A. Requiring Lean Compliance in Compliance Program Standards	313						
	1. Requiring Lean Compliance Management in	313						
	Assessing Due Diligence	315						
	2. Requiring Lean Compliance in Provisions	010						
	Addressing Specific Program Features	316						
	B. Considering Lean Compliance in Factual							
	Determinations	319						
VII.	LEAN COMPLIANCE AS A VALUABLE CORPORATE							
	Management Tool							
	A. Viewing Lean Law Compliance as a Loss							
	Prevention Tool	320						
	B. Lean Compliance Is an Effective Way to Respond							
	to Legal Uncertainty and to Avoid Changing							
	Sources of Waste	322						
	C. Superiority of Lean Compliance over Command	202						
	and Control Alternatives	323						
	D. Techniques for Implementing Lean Compliance							
	Management across Diverse Compliance Settings	205						
	and Practices E. Documentation Benefits of Lean Compliance:	325						
	Establishing a Record of Compliance Due							
	Diligence	326						
	Duugonoo	540						

CONCLUSION: FUTURE DEVELOPMENT OF LEAN				
COMPLIANCE AS A LEGAL TOOL				
A. Applying Lean Compliance Standards in Broader				
Substantive Contexts	327			
B. Applying Lean Compliance Principles to Broader				
Legal Management Challenges	328			
C. Continuing to Learn from Startup Companies				

Introduction

I.

CONFRONTING LEGAL UNCERTAINTY

A. Why Compliance Practices Must Respond to Legal Uncertainty

Legal uncertainty is an important influence on corporate law standards and practices. This uncertainty stems from many sources, including difficulties in identifying and understanding the vast array of legal standards that currently govern complex corporations and further difficulties in implementing management practices to ensure compliance with these standards. Ensuring that all members of a corporate organization act lawfully is often a highly unpredictable and difficult task.²

Legal uncertainty has been a constant practical problem for corporate compliance specialists and counsel as they help company leaders construct and operate law compliance programs. Corporate commentators have repeatedly noted the practical burdens of legal uncertainty facing corporations and the need for better management tools to properly direct corporate affairs despite this uncertainty. If certain types of corporate liability are unpredictable and thereby uncontrollable, the resulting corporate losses can be equally uncontrollable. These uncontrolled costs may create barriers to otherwise useful business endeavors because the endeavors are too costly to initiate or continue once the uncontrolled costs are taken into account. Or these uncontrolled costs may just drive the affected businesses out of existence. Because of these significant threats of uncontrolled liability to valuable corporate activities,

^{2.} See, e.g., A Mammoth Guilt Trip: Criminalising the American Company, Economist, Aug. 30–Sept. 5, 2014, at 21–24 (noting that "the legal environment for companies [is] staggeringly complex" and that "the crimes [companies] are accused of are often obscure and the reasoning behind their punishments opaque").

means for overcoming legal uncertainties and effectively managing law compliance in large corporate organizations have been significant management concerns (and objects of frustration) for some time. These concerns have been raised with increasing urgency as corporate penalties have grown larger and more frequent.³

Amidst concerns over the lack of effective means for managing corporate law compliance, many corporate law compliance specialists have focused on (and been largely overwhelmed by) the large uncertainties of legal requirements governing corporate activities. What they have missed is that there are currently known methods for responding to these uncertainties. Indeed, many companies already know how to respond to other types of uncertain threats in their operating environments. Companies deal with large uncertainties in diverse business contexts and have rationally constructed methods for responding to these uncertainties. Unfortunately, discussions of corporate organizational liability and associated legal uncertainties have not linked corporate concerns about potential corporate liability to existing corporate knowledge about managing uncertainty. In short, there has been little effort to apply known uncertainty management techniques to the particular task of corporate law compliance.

This Article is aimed at filling this gap. It draws on recently accumulated knowledge about managing uncertainty in some of the most uncertain environments in the business world. It examines techniques that have proven successful in startup companies where managing uncertainty is a fundamental key to success.⁴ Startup companies must regularly oper-

^{3.} See Biggest Bank Settlements, Wall St. J., http://www.wsj.com/articles/SB10001424127887323808204579084932990175004.

^{4.} This Article uses principles of lean startup management to illustrate approaches to corporate law compliance. Lean startup management is an approach to launching businesses and products that relies on validated learning about successful practices and product designs. See generally Eric Ries, The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses (2011). While initially applied in the development of new businesses, the principles underlying lean startup management are now recognized as valuable tools in any setting where an individual, team, or company wishes to introduce new products or services into a market with uncertain demand characteristics and other important uncertainties. Wade Roush, Eric Ries, the Face of the Lean Startup Movement, on How a Once-Insane Idea Went Mainstream, Xconomy (July

ate within a fog of unknowns in managing highly uncertain technologies, products, and markets. Analysts of successful startup companies have concluded in recent years that there are systemic approaches to the uncertainties startups face. In particular, these entities are often well served by resolving performance uncertainties through "lean management."

The term "lean management"—misunderstood by many—does not refer to management with lean (that is, meager or scarce) resources. Rather, the term "lean" refers to lean commitment—that is, management with a rationally chosen but small commitment to any particular course of conduct until the efficacy of that course of action is confirmed.⁵ This approach to structured learning about successful conduct through tentative action selection, coupled with continuous measurement and evaluation of results achieved (and possible revisions of the actions for additional tentative implementation and testing), defines a generally applicable method for managing successful corporate performance within highly uncertain constraints and minimizing wasteful applications of resources to ineffective actions. In short, these lean management methods, based on validated learning through testing and

^{6, 2011),} http://www.xconomy.com/san-francisco/2011/07/06/eric-ries-the-face-of-the-lean-startup-movement-on-how-a-once-insane-idea-went-main stream/. This Article argues that techniques similar to those used in lean startup management can enable companies to manage successful compliance practices amidst uncertain compliance demands and environments

^{5.} The objective of lean management is to ensure as far as possible that commitments of resources achieve some corresponding increase in valuable performance. Thus, for example, in the context of lean manufacturing, lean management entails steps to ensure that manufacturing practices result in measurable value for product customers. The creation of value for a customer is the ultimate measure of successful performance, and any use of resources that does not serve this end does not contribute to successful manufacturing performance. Hence, lean management principles dictate that such a wasteful use of resources should be eliminated from company activities. Put in positive terms, uses of resources should have tractable links to the achievement of product value for customers. Testing of practices and their impacts on value provides these links, but absent testing they should not be presumed, as unappreciated waste may result. See Matthias Holweg, The Genealogy of Lean Production, 25 J. of Operations Mgmt. 420, 420–37 (2007); see generally James P. Womack, Daniel T. Jones & Daniel Roos, The Machine THAT CHANGED THE WORLD (1990) (examining lean production in the context of the automobile industry).

practice development using testing results, provide means for managing successful performance amidst high uncertainty. And (it will be argued here) lean management offers valuable methods for accomplishing the specialized tasks needed for corporate law compliance amidst high legal uncertainty.

B. The Boundaries of Rationality and Business Planning for Law Compliance: How Legal Uncertainty Leads to Legal Planning Frustration and Acceptance of Liability

Managing corporate law compliance—that is, identifying corporate actions that will comply with applicable laws and ensuring that corporate employees take those actions—is subject to many uncertainties. The actions needed for compliance are frequently unpredictable for a number of independent reasons and the resulting uncertainties are often cumulative. For example, ambiguity in the wording of a particular law may create uncertainty about what actions are legally required. To this uncertainty may be added further uncertainty about whether corporate employees will take legally required actions even if they are instructed to do so. The resulting chain of aggregate uncertainty is often formidable and highly intimidating to persons (such as corporate executives, law compliance specialists, and other organizational managers) who must institute and monitor steps to comply with complex laws in complex organizations undertaking complex business activities.

Amidst high levels of legal uncertainty, some corporate leaders may conclude that the rational course is simply to accept some misconduct and to view associated corporate liabilities as largely unalterable costs of doing business. This view treats legal requirements as the equivalent of the weather—that is, as sources of constraining forces that limit activities and that must be responded to when problems arise, but that cannot be planned for in detail with much success. Laws, like the weather, may be accommodated as sources of highly uncertain contextual constraints that will unexpectedly limit (or burden) certain types of business activities, but that will have levels of impact that cannot be influenced greatly by preventative actions or affirmative corporate planning.⁶ Companies that

^{6.} This is equivalent to simply ignoring applicable laws as targets of corporate planning (with acceptance of the consequences). Some research has

adopt this approach (towards some or all legal obligations and sources of liability), choose to "just live with" the consequences of their employees' illegal or liability-inducing actions just as they live with the adverse effects of a stormy day on company operations and business levels. Company leaders with this attitude are simply resigned to accept the resulting illegal conduct and associated costs.

At extreme levels of uncertainty, corporate managers may find net benefits in accepting penalties and liability in this way. They may believe that the cost of preventing highly unpredictable events is just too large and that it is foolish to throw away resources on practices that have little or no effect on improving law compliance. If available corporate management methods are poorly able to respond to uncertain legal demands, the rational (and cost effective) response is to tolerate the resulting illegal conduct, and to accept related corporate liability costs. Of course, a company can still choose not to continue in a line of business that leads to these unavoidable costs, but this may be the last point of rational legal cost control left to corporate managers. Once a company chooses to be in a specific line of business, attempting ineffective (and perhaps falsely reassuring) law compliance efforts of no benefit will not make liability-induced costs go away, but will rather just add the costs of carrying out ineffective efforts to the costs of liability.

Of course, most companies will want to choose lines of business they deem profitable and reduce as much as possible the liability costs of being in those lines of business. This means that, where possible, corporate managers will wish to adopt management practices that respond successfully to the legal uncertainties in their chosen lines of business via effective means to reduce and respond to uncertainties and comply with applicable laws. This Article describes means to carry out this strategy by responding to legal uncertainties through learning processes and corporate conduct adjustments that move corporate actions towards law compliance success. The

shown that parties faced with highly ambiguous legal requirements tend to ignore legal constraints on their conduct altogether and are guided by their other preferences. See Yuval Feldman & Shahar Lifshitz, Beyond the Veil of Legal Uncertainty, 74 Law & Contemp. Probs. 133, 142–59 (2011) (arguing that "legal ambiguity might cause people to undermine their consideration for the law altogether and resort to alternative motivational causes—their true preferences").

practices discussed here are premised on the view that overcoming legal uncertainty is one of the fundamental goals of law compliance management. Uncertainty about legal standards and conduct requirements is neither irrelevant nor insurmountable. Success in overcoming the hurdles of uncertainty requires compliance management practices focused on both reducing legal uncertainty and implementing compliance practices based on what has been learned.

This Article treats legal uncertainty as a given and describes how organizations (and individuals within them) can manage advantageous responses through lean compliance methods. Part II assesses how and where problems of legal uncertainty appear. Part III describes the basic principles underlying lean management. Part IV addresses how lean management can respond to legal uncertainty and form the basis for law compliance success despite legal uncertainty. Part V covers steps to construct corporate law compliance programs reflecting lean compliance management. Part VI presents a normative analysis of reasons to include lean compliance principles in legal standards for corporate and organizational liability and assesses how this can be accomplished. Part VII describes practical means for companies to maximize compliance benefits by using lean compliance methods. These discussions illustrate how compliance program specialists can apply lean management methods to evaluate existing compliance programs. These discussions will also aid corporate counsel and government officials who must sometimes evaluate the quality and effectiveness of corporate compliance programs. The Article concludes with observations on the potential future development of lean law compliance principles as legal tools.

II. DISSECTING LEGAL UNCERTAINTY

A. Characteristics of Legal Uncertainty

The nature of effective responses to legal uncertainty depends in part on the features of legal uncertainty itself. This Part of this Article contains a brief overview of sources of uncertainty that may impair the selection and direction of law compliance efforts. Once these sources and features of legal uncertainty are better understood, management practices that

match the uncertainties (and at least partially overcome them) are described in Part V of this Article.

Legal uncertainty refers here to uncertainty about how to comply with applicable legal requirements. Legal uncertainty is high where actions that will successfully achieve law compliance are hard to project and planning for these actions is correspondingly difficult. This type of difficulty can stem from several types of information gaps leading to different forms of planning difficulty. The analyses of legal uncertainty in this subpart begin with an assessment of how information processing problems and gaps lead to legal uncertainty. For simplicity, the discussions here emphasize sources of legal uncertainty potentially surrounding corporate criminal liability, but similar factors are likely to produce parallel uncertainties regarding how to comply with other types of legal requirements such as civil statutes and regulations.

1. Planning Gaps Due to Complexity of Compliance Environments

Uncertainty about how to comply with applicable laws may result in part from the complexity of applicable requirements, the complexity of contemplated actions governed by the requirements, or both. The complexity of legal requirements and the complexity of related conduct both affect the number of potential interactions between the requirements and conduct and the extent of resulting coordination burdens. As the number of combinations becomes larger, the number of potential actions that need to be planned to ensure law compliance also grows. At some level of complexity, the fact-finding needed to consider all of the implications of all of the combinations of requirements and responsive actions will be too great. Some features of contemplated actions will just

^{7.} Legal uncertainty results from such factors as the limitations of language in authoritative sources of law, as well as from enforcement uncertainties. See Yuval Feldman & Doron Teichman, Are All Legal Probabilities Created Equal?, 84 N.Y.U. L. Rev. 980, 985 (2009).

^{8.} See, e.g., Giuseppe Dari-Mattiacci & Josephine van Zeben, Legal and Market Uncertainty in Market-Based Instruments: The Case of the EU ETS, 19 N.Y.U. ENVIL. L.J. 415, 420–21 (2012) (noting that conduct choices become more difficult with increasing legal uncertainty; for example, uncertainty about pending judicial decisions renders conduct choices problematic since "parties will try to anticipate the outcome of adjudication and act accordingly").

not be matched to applicable requirements, but will instead be planned and executed without regard for the requirements. Uncertainty about whether the resulting actions are lawful will result because full planning for law compliance depends on consideration of too many factors. In this way, complex legal environments, coupled with complex business conduct carried out amidst these environments, can produce considerable compliance planning difficulty and legal uncertainty.

2. Planning Gaps Due to Changing Environments

Even if planning for law compliance were perfectly attainable under static conditions—that is, if all the relevant legal requirements and actions needed for compliance in a given setting could be considered and the relevant actions planned and executed accurately—changes in legal requirements or operating environments could undercut this perfect planning and create new legal uncertainties. Yesterday's perfect legal planning is today's legal uncertainty amidst changing legal standards and business activities. Changes in laws or changes in business activities subject to laws can each alter the actions needed for law compliance. In addition, changes in business activities or pressures can alter the likelihood that company employees will deviate from properly formed plans for compliance.

Changes in conditions like these can make already serious legal uncertainty even worse. Typically, legal uncertainty will be present even before changes are made because compliance planning will not be perfect even under static conditions involving relatively stable laws and business activities. Changes can add new uncertainties to already uncertain law compliance situations. Change creates its own sources of uncertainty because compliance planning depends on new and often poorly understood factors.

3. Planning Gaps Due to Imperfect Perception of Legal Requirements

Additional legal uncertainty stems from imperfect perception of what laws require and when they are applicable. Misperceptions of what laws require may stem from the ambiguity of language used in laws. Misperceptions of whether laws are applicable to corporate activities may arise because the activi-

ties are undertaken by persons whose conduct is difficult to monitor. Where, as is typically the case, corporate managers must plan for law compliance by subordinate corporate employees, two types of misperceptions about the conduct of subordinates may affect the difficulty of compliance planning. First, the managers may be uncertain about what laws are applicable (due to misperceptions of the actions actually being pursued by employees and an inability to identify accurately the laws that are implicated by those actions). Second, managers may be uncertain if laws known to govern employees' actions are being complied with (because the employees may hide their non-compliance to shield themselves from discipline or to avoid losing rewards, such as sales bonuses, obtained via illegal actions). For these reasons, imperfect perceptions of legal requirements and related company actions can produce large gaps in compliance planning capabilities and create associated legal uncertainties.

4. Planning Gaps Due to Difficulties in Operationalizing Legal Requirements

Even where the demands of laws are clear to legal specialists, these demands may be unclear to less well-informed parties who must actually comply with the laws. While it is true that "ignorance of the law is no excuse" and not a ground for withholding corporate liability, such ignorance by employees carrying out corporate activities is a potential source of mistargeted law compliance efforts and, hence, its own source of legal uncertainty. In large organizations, where executives and their legal counsel may know (or be able to predict with expert legal help) what various laws require, this knowledge on the part of top executives or counsel must be applied to operationalize the requirements. To do this, low-level employees must typically be guided towards compliance through internal corporate standards or work rules (or both) describing compliance-related tasks that those employees understand and have the resources and capabilities to carry out. Employees must also be motivated to take legally mandated actions once they understand those actions. If the translation of high-level knowledge of legal requirements into guidance provided to low-level employees is poorly accomplished, low-level employees will receive inaccurate or incomplete directions about how to adhere to legal requirements. Flaws in such processes for particularizing legal requirements to match specific company operations can thus create additional sources of misdirection and legal uncertainty.

B. Multi-Layered Sources of Legal Uncertainty: An Illustration Drawn from Federal Securities Law

The variety of legal uncertainties present in many types of company activities is illustrated by the following example drawn from one frequently encountered provision of federal securities law. Insider trading liability is a concern for many companies and a source of continuing uncertainty regarding the nature of prohibited conduct.⁹ Parallel legal uncertainties arise under many other complex statutory and regulatory provisions, making the following case study of insider trading a window into a much broader range of legal uncertainties and law compliance problems plaguing corporations in diverse fields of activity.

- 1. Uncertainties Stemming from Substantive Requirements
- a. Ambiguity in the Root Statute: Deceptive Brevity and Simplicity

The most important insider trading prohibitions under federal laws stem from a very brief statutory provision within the Securities and Exchange Act of 1934 (Exchange Act). Section 10(b) of the Exchange Act runs for one paragraph of text. The key portion of this section for purposes of insider trading liability prohibits parties from using "any manipulative or deceptive device or contrivance" in connection with the purchase or sale of certain securities. To Section 10(b) also authorizes the federal Securities and Exchange Commission (SEC) to issue regulations defining the features of practices prohibited under the section. In providing for additional SEC regulations, the drafters of Section 10(b) recognized the incompleteness of their original statutory treatment. Section

^{9.} For an overview of the development of the insider trading liability standards addressed in this subpart, see Thomas Lee Hazen, *Insider Trading and Outsider Trading Under SEC Rule 10b-5*, American Law Institute Continuing Legal Education: Fundamentals of Securities Law (May 16–17, 2013).

^{10.} See 15 U.S.C § 78j(b) (2012).

^{11.} Id.

10(b), as originally drafted, left many unresolved issues and corresponding uncertainties needing resolution in clarifying regulations. Thus, some degree of legal uncertainty was built in at the outset, to be reduced (so Congress thought) via SEC regulations.

b. Implementing Regulations: Some Clarifications but with Some Fundamental New Ambiguities and Uncertainty

The SEC's regulations implementing Section 10(b) removed some uncertainties but added others. The SEC issued a series of rules aimed at defining various substantive and procedural aspects of liability under Section 10(b).¹² One of the most important for purposes of insider trading liability was SEC Rule 10b-5, which specified that under Section 10(b) it is illegal to "make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading."13 This standard created at least two new and important sources of uncertainty in insider trading law. The standard left undefined what constituted a "material fact" and also left undefined how to determine whether statements were misleading in light of "the circumstances under which [the statements] were made" Additional provisions of Rule 10b-5 contained other ambiguous prohibitions stated in broad and incompletely defined terms.14

c. Regulatory Rulings: The SEC Resolves Its Own Ambiguities Case by Case

The broad and poorly defined terminology used in Rule 10b-5 eventually produced disputes that forced the SEC to rule

^{12.} As of the end of 2013, the SEC had issued twenty-one rules defining the meaning of Section 10(b), although not all were still in force since some had been rescinded by the agency. *See* 17 C.F.R. §§ 240.10b-1 to -21 (2014).

^{13.} *Id.* § 240.10b-5(b).

^{14.} For example, other portions of Rule 10b-5 prohibit, in connection with the sale or purchase of certain securities, the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange to "employ any device, scheme, or artifice to defraud, [or] engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person." *Id.* §§ 240.10b-5(a), (c).

on the meaning of the language in its own prior regulation. Rule 10b-5 says nothing directly about illegal insider trading accomplished by non-disclosures—that is, insider trading carried out by a company insider who trades with another party while withholding material information held by the insider, but not known by the other trading party. The SEC addressed this type of activity and clarified that Rule 10b-5 does prohibit this type of insider trading in Cady, Roberts & Co.15 There, the SEC ruled that a corporate insider must abstain from trading in the shares of her corporation unless she has first disclosed all material, non-public inside information known to her. 16 The SEC emphasized that "the duty [recognized in Cady, Roberts] arose from (i) the existence of a relationship affording access to inside information intended to be available only for a corporate purpose, and (ii) the unfairness of allowing a corporate insider to take advantage of that information by trading without disclosure."17 In short, the SEC filled a definitional gap in Rule 10b-5 by relying on a specific policy reasoning and set of corporate governance dynamics derived from the ongoing relationships between corporate insiders and corporate shareholders. Until the SEC's decision in Cady, Roberts, this policy reasoning and the implications for insider trading liability were hardly predictable with substantial certainty. Rather, it was a fundamentally important source of legal uncertainty and a correspondingly important source of uncertainty in law compliance management.

These sorts of policy-based choices in rule development are common as agencies gain greater understanding of legal standards and the best ways to implement them. This type of rule development accounts for corresponding legal uncertainties and planning difficulties across many regulatory domains. Even changes in a single regulation can produce widespread legal uncertainty. For example, the SEC's evolution of insider

^{15.} Matter of Cady, Roberts & Co., 40 S.E.C. 907, 911 (1961).

^{16.} While Rule 10b-5 does not explicitly mention liability for withholding information, the SEC felt that an affirmative duty to disclose material information or abstain from trading was implied by the duties of insiders to their corporations, which include duties to apply specially obtained corporate information only to promote corporate ends. *See id.* at 912 & n.15.

^{17.} Chiarella v. U.S., 445 U.S. 222, 226–27 (1980) (describing the development and policy basis for the SEC's interpretation of Rule 10b-5 in the *Cady, Roberts & Co.* decision).

trading regulations created uncertainties affecting many types of businesses because insider trading liability can stem from confidential business information in diverse fields.

d. Judicial Analyses Fill Gaps but with New Complexity

Even after *Cady, Roberts*, the scope of insider trading liability remained highly uncertain. One reason for this was that the decision in that case simply shifted the focus of concern and litigation to new ambiguities left behind by the language of the decision. These ambiguities involved key questions about who would be treated as insiders and how insiders' duties to limit stock trading could be discharged by information disclosures. Judicial analyses have produced a large and complex body of case law clarifying these and other aspects of insider trading liability and sometimes adding additional ambiguities and uncertainties. As of 2014, Rule 10b-5 had been cited in 52 Supreme Court opinions, 2,024 federal courts of appeals opinions, and more than 6,872 federal district court opinions. ¹⁸

The degree to which these opinions resolve or create uncertainties in insider trading standards can only be ascertained by reviewing the judicial opinions involved. The aggregate number of these citing opinions indicates the large number of potentially relevant information sources regarding this one legal standard and the corresponding monitoring burdens facing corporate managers who must keep current on the practical meaning of Rule 10b-5.

e. Changes in Base Standards over Time Inject New Uncertainties

The discussion to this point has treated Section 10(b) and Rule 10b-5 as unchanging standards. Of course, the history of Section 10(b) and Rule 10b-5 has not been this simple. The provisions of Section 10(b) have been changed four times since their original enactment in 1934. Pule 10b-5 has been

^{18. 17} C.F.R. § 240.10b-5 Citing References, Westlaw, https://a.next. westlaw.com (search for "17 C.F.R. §240.10b-5"; then click on "Citing References" tab; then click on "Cases" hyperlink; expand "Federal" category under "Jurisdiction") (last visited Jan. 24, 2014).

^{19. 15} U.S.C. § 78j History, Westlaw https://a.next.westlaw.com (search for "15 U.S.C. § 78j"; then click on "History" tab) (last visited Jan. 24, 2014).

changed eight times since its promulgation in 1948.²⁰ Each of these changes resulted in new uncertainties about the viability of previous insider trading standards (a form of negative uncertainty related to doubts about the preemptive or changing effect of the new statutory or rule language) as well as adding new sources of uncertainty about the scope of insider trading prohibitions under the new standards (a form of positive uncertainty related to ambiguity in the new language added to the statute or rule).

2. Uncertainties Stemming from Imperfect Employee Direction Inside Companies

In addition to uncertainty in legal standards, companies suffer from further uncertainty in determining how to direct employees towards law compliance. Ideally, companies should implement employee guidance and incentives that both inform employees about legally required conduct and encourage employees to pursue this conduct. Unfortunately, the selection and implementation of such guidance and incentives involve their own uncertainties. These management process uncertainties add to the legal standard uncertainties just discussed. For example, focusing on insider trading prohibitions, corporate executives may be uncertain about both what the law requires and uncertain about how to instruct and motivate corporate employees to address insider trading concerns in business activities.

In organizations, law compliance is accomplished through a variety of agency processes. Actions by corporate agents—typically employees—are needed for law compliance because compliance planning and execution are typically split among different parties. Corporate managers plan compliance-related activities on behalf of corporate principals (that is, on behalf of corporations acting as legal entities).²¹ Corporate employ-

^{20.} Id.

^{21.} Actually, corporate managers are corporate agents themselves in these processes. Their agency function is to define the aims and tasks of other corporate agents who carry out corporate operation. One of the sometimes difficult concepts surrounding corporations is that there are no real principals in corporations—the corporations themselves (each of them a legal fiction) are the principals in all corporate settings. These corporate principals are served by many agents (from the top executives down to the lowest level employees, plus possible outside, independent agents) who carry out

ees, acting as corporate agents, carry out most of the planned activities and undertake most legally required activities for their companies.

In shaping the actions of employees as corporate agents for purposes of law compliance, corporate managers must try to influence the conduct of employees remotely through such indirect means as corporate conduct standards, conduct accountability processes, and conduct monitoring. If these agency-shaping actions are poorly executed, they may create uncertainties about whether employee-agents will pursue law compliance in their day-to-day business activities. Flawed management processes may create compliance uncertainties because employees have inadequate guidance about how to comply with legal standards. Employee management processes may also create compliance uncertainties even when directions to employees are properly formulated because employees may not have adequate incentives to follow the directions.

Gaps between principals' wishes about what should be done and agents' actions in carrying out the wishes are instances of agency process dysfunction or "leakage." In law compliance programs, agency leakage occurs when employees in corporate organizations do not pursue actions that best serve the law compliance interests of their corporate principals. The remainder of this subpart describes sources of agency leakage and associated legal uncertainty that result from flawed compliance directions to employees and weak compliance incentives in employee management processes.

a. Uncertainty in Directing Personnel to Comply with Requirements

Directions to corporate employees regarding compliance can be conveyed in many ways.²³ These directions should translate legal requirements into practical work directions that are relevant to particular employees' jobs and work environ-

tasks on behalf of the corporations and whose actions are collectively the work of the corporate entity.

^{22.} See, e.g., Kenneth J. Artow, *The Economics of Agency, in Principals* and Agents: The Structure of Business 37, 37 (John W. Pratt & Richard J. Zeckhauser eds. 1985).

^{23.} See Richard S. Gruner, Corporate Criminal Liability and Prevention $\S 14.02[6][a]$, [d] (2004).

ments. Employees need guidance about how to complete their work in compliance with legal requirements, with the guidance stated in terms that the employees can understand and implement.

In translating legal requirements into particular work guidance, something may get lost in translation. Employees may be misdirected, either because they are given incomplete or misstated information about how to comply with applicable laws, or because the employees simply do not pay attention to the directions they are given because they do not believe that corporate managers actually expect them to comply with the directions.

Operationalizing intricate legal standards through meaningful directions to employees is often difficult in practice, resulting in compliance planning challenges and unexpected employee misconduct. Administrative uncertainties about how to properly direct corporate employees to attain corporate law compliance add to substantive uncertainties already present in legal standards. Corporate managers creating conduct standards for employees must address highly complex and sometimes ambiguous legal standards. For example, in creating practical guidance for employees regarding how to avoid illegal insider trading, corporate managers must address and explain difficult concepts such as material information and illegal tipping by company insiders of other stock traders. To have their desired impacts on employee actions, the explanations of insider trading concepts and prohibitions need to be phrased in operational terms that employees can use to guide their conduct. Errors in descriptions of compliance-promoting conduct, misunderstandings of these descriptions, and gaps in delivery of the descriptions can all contribute to poor law compliance results. All of these problems add to administrative uncertainty regarding corporate law compliance management.

b. Uncertainty in Motivating Personnel to Comply with Requirements

Even where compliance directions are well stated and clearly explained to employees such that the employees understand the actions that are legally required, employees might still not follow the directions. Employees may have motivations to undertake other conduct. Motivating employees to undertake actions needed for corporate compliance is often difficult, leading to significant gaps in corporate law compliance. Employees may choose to violate known legal standards applicable to their conduct for at least three reasons.

First, an employee may just think that he or she will not get caught. Consequently, the employee may feel that his or her personal interests are better served by pursuing other private or corporate tasks. If there are few adverse consequences from ignoring legal requirements, why bother to follow compliance directions?

Second, an employee's company may have given the employee positive reasons to overlook law compliance and pursue other profit-making activities. Corporate incentives frequently provide large rewards for activities that have direct links to corporate profits (like closing extensive product sales or producing large volumes of products in factories). In some cases these rewards are so attractive that they focus employees excessively on profit-making considerations to the exclusion of other corporate concerns. For example, time spent by employees in filling out legally required forms may come at the expense of making one more sales call that might increase an employee's sales commissions. If actions promoting law compliance are not rewarded in ways that cause them to be given a high priority in the mix of employee activities, law compliance activities will often be displaced in the allocation of an employee's scarce time by other tasks that are directly and highly rewarded in corporate incentive systems. The net incentives in such circumstances may cause some parties to act illegally even though they know very well what the law requires.

Third, even where an employer wishes to create incentives for employees (via combinations of discipline and rewards) that value lawful conduct over other types of employee actions and that thereby create net incentives in favor of law compliance, corporate managers may have great difficulty in administering these incentives. Problems may arise in determining whether particular employees have actually undertaken actions needed for law compliance so that rewards are given to individuals only where the needed actions are taken. Both under- and over-rewarding compliance-related actions may be problems in these settings. If employees perceive that they (or other individuals in similar situations) receive no penalties for acting unlawfully or in violation of corporate law compliance

standards, then there will be no real disincentives to discourage the employees from adopting similar misconduct. If employees perceive that they receive compliance-related rewards for actions that do not achieve meaningful law compliance results (such as rewards for attending training sessions regardless of whether the conduct standards taught in the training are later followed), then employees may believe that corporate managers will continue to reward the façade of corporate law compliance. The employees may believe this because they think managers cannot see beyond the façade to detect the employees' misconduct or, worse yet, employees may think that managers actually want them to act illegally and are only rewarding superficial compliance-related tasks to keep up the appearance of corporate law compliance before external officials. These types of motivational challenges produce corresponding gaps in managers' abilities to plan for means to motivate corporate employees to carry out corporate law compliance as corporate agents. These planning gaps produce additional administrative uncertainties regarding how to achieve corporate law compliance.

In the context of insider trading law compliance, these sorts of administrative difficulties would be present as firms sought to detect and punish instances of illegal insider trading by employees on behalf of their corporations for which the corporations would bear liability. Gaps in the detection and punishment of such misbehavior would weaken deterrence of similar future misconduct. Such incomplete detection and punishment would create ongoing uncertainty about whether company actions were sufficient to motivate employees to avoid insider trading and ensure law compliance in this legal area.

3. Uncertainties Due to Varying Business Pressures Promoting Illegal Conduct

One additional source of uncertainty about corporate law compliance administration comes from outside corporations. Varying business pressures influencing corporate activities may create unexpected motivations for illegal actions by company employees. Law compliance measures and incentives that are adequate for normal business conditions may not suffice for periods of heightened business stress. Under heightened stress—such as arises when a weakened economy makes product sales particularly difficult or when increased sales quotas make former sales efforts no longer adequate—employees are under new internally or externally created pressures to attain superior corporate performance. New pressures may result because employees are expected to work with fewer resources or amidst increased competition or decreased customer demand. Persons acting with new levels of desperation or frustration may be willing to do things—including acting illegally or taking actions with clear risks of corporate liability—that the same parties would not have done in more normal business conditions. Changes in business practices and conditions can therefore lead to new and unexpected types of illegal conduct and unexpected risks of such conduct.

These unexpected risks correspond to gaps in compliance planning and increased law compliance uncertainty, even in companies that have been operated with the best of compliance planning and compliance management to that point. Change is the enemy of past plans and the cause of new planning failures. In the compliance context, this means that change, such as increased or altered reasons to act illegally (or to tolerate illegal actions by others), can produce unexpected forms of illegal actions in corporate organizations.

Returning to the example of practices aimed at preventing insider trading, unexpected pressures to engage in illegal insider trading may arise because particular employees gain unusual access to material, non-public information that gives them a trading advantage over other parties who do not have the information. This may occur through many means, from a low-level clerk's learning of a still secret corporate takeover attempt to a researcher's early knowledge that an apparently successful drug has serious side effects not yet known to the public. Insider trading in these circumstances (if it occurs) involves unexpected illegal actions in response to unforeseen pressures encouraging misconduct. Employees gaining access to material information in unpredictable ways are faced with unexpected pressures to act illegally (that is, pressures resulting from highly attractive, but illegal trading opportunities). Since these pressures are at least somewhat unpredictable, they cannot be fully addressed in law compliance planning and consequently form yet another source of law compliance uncertainty.

C. Managing Legal Uncertainties as Corporate Performance Uncertainties

The legal uncertainties profiled in this part are not fundamentally different than other management uncertainties faced by corporate organizations. Business corporations face many types of highly uncertain business challenges and constraints on successful performance. Corporate managers direct business affairs amidst many uncertain external forces that their corporations do not control. For example, a corporation making and marketing a new product is subject to numerous uncertainties. These uncertainties stem from many sources such as gaps in knowledge about new technologies relied on in the product, uncertain customer demand for the new product, potential difficulties in manufacturing the new product, marketing challenges in presenting the new product to customers who are unfamiliar with the product's design, and unanticipated product support and maintenance problems related to distinctive features of the new product. All of these sources of potential problems correspond to important performance uncertainties, some derived from factors inside the relevant company and some from external factors largely outside the company's control. Management practices must respond to these uncertainties. Ideally, the practices should reduce these uncertainties where possible and monitor corporate actions closely to adjust them appropriately and promptly to actual circumstances where uncertainties are irreducible and future circumstances are unpredictable. Uncertainties are therefore both targets of risk reduction and necessary environmental factors that dictate proper management practices for responding to residual uncertainties. Steps to reduce uncertainties and to learn how to respond to residual uncertainties define the dual objectives of many corporate management processes for overseeing traditional business activities.

These dual objectives of uncertainty reduction and response learning should define corporate law compliance practices as well. Companies should aim in their compliance practices to (1) reduce uncertainties that corporate employees will act illegally, and (2) learn how to respond to uncertain legal demands in settings where residual law compliance uncertainties are irreducible and unavoidable. This combination of directive action (guiding employees towards compliance to

avoid uncertainties about compliance-related conduct) and learning (discovering how to resolve remaining compliance uncertainties through trying and evaluating alternative practices) can help companies identify a path towards maximizing compliance levels. Law compliance is an uncertain dimension of corporate management, but so are many other aspects of corporate performance and success. To achieve compliance success, companies should look to their past experience with uncertainties (and that of other companies) for management tools that have aided the companies in directing corporate activities amidst high performance uncertainty.

Fortunately, management practices for guiding business performance amidst high uncertainty are increasingly well understood. There is a growing body of knowledge about such practices derived from management experience gained in startup companies. Startup company analysts have identified generally applicable approaches to pursuing performance success amidst high initial uncertainty about how to achieve success.²⁴ Startup companies—some of the most uncertainty-plagued business enterprises around—have been the testing ground for these new practices. The techniques that have emerged are not limited to these business environments or even to the achievement of commercial success and corporate profits. Rather, the recently formulated techniques for managing organizations amidst high uncertainty are generally useful methods that offer great promise when applied to the particular challenges and uncertainties of corporate law compliance.

Amidst uncertainties about products, practices, and customers, startup companies must find their way (often relatively quickly, in light of their limited resources) or fail. In response, many successful startups have prevailed by adopting practices that emphasize trial and error and quick learning. These practices—adopted in light of company managers' limited ability to predict and choose successful practices and a corresponding willingness to try many alternatives and adjustments so long as none of the trials take too long or involve too many resources—have elevated a structured form of "trial and error" to a distinct management style. This style—commonly called

^{24.} See Ries, supra note 4; Steven G. Blank, Why the Lean Start-Up Changes Everything, 91 Harv. Bus. Rev. 63, 63–72 (2013).

"lean management"²⁵ in reference to its reliance on lean or small commitments of resources to courses of conduct until the conduct is tested and proven—has informed new approaches to the management of uncertain projects and business environments in both startup companies (where uncertainties are often pervasive) and large companies (where high uncertainties still exist in projects involving limited corporate experience such as the development of new products or new technology areas).

III. Basic Principles of Lean Management

A. Learning to Overcome Uncertainty

Considered as a generally applicable technique for managing organizational performance amidst uncertainties, lean management turns on several basic principles.²⁶ Efforts to identify and systematize the features of lean management have grown out of the needs of the startup company community, so these principles are often described in terms of the needs and characteristics of startup companies. In startup companies where important features of new technologies, business practices, products, or markets are often initially uncertain—managers must both embrace uncertainty and yet rationally move forward despite the uncertainty. Managers must overcome surrounding uncertainties to implement successful business practices that produce popular products and substantial profits. Often, a startup company's search for a successful business model must be conducted with somewhat desperate speed because the resources of the startup company are small and quickly exhausted.

^{25.} Lean management principles applied in some startup companies are derived from earlier lean management or lean production methods first developed by Japanese manufacturers and perfected by Toyota for use in automobile manufacturing. *See generally* Julian Page, Implementing Lean Management Techniques (2003); Stephen A. Ruffa, Going Lean: How the Best Companies Apply Lean Manufacturing Principles to Shatter Uncertainty, Drive Innovation, and Maximize Profits (2008). For descriptions of earlier Toyota management methods implementing some counterparts to lean startup company methods, see Taiichi Ohno, Toyota Production System: Beyond Large-Scale Production (1988).

^{26.} See Ries, supra note 4, at 8-9.

The need for quickly developed but rationally constructed paths to success amidst high uncertainty about how to proceed is a defining feature of business management in startup environments. The search for means to overcome these uncertainties is the business of startups. Or, as one leading observer of startup companies has noted, a startup must search for a business model that works on a large scale starting with little information on where to look for the model.²⁷ The corresponding compliance challenge in many companies is to search for a system of compliance practices (or compliance model) that will ensure regular law compliance amidst complex legal requirements, poor abilities to definitively plan for law compliance, and corresponding uncertainties about how to proceed towards law compliance, at least at the outset. Companies must learn how to pursue law compliance amidst uncertain legal demands, just as startup companies must learn how to serve highly uncertain customer desires.

Lean management techniques constitute new business tools for dealing with uncertainty and finding successful business practices. Business performance dominated by uncertain constraints must be approached differently than traditional business practices in well-established industries. Such industries can look to long-standing performance and extensive experience in satisfying customer demands or attaining other performance goals. These goals are relatively well defined. In contrast, performance amidst uncertain constraints (as occurs in both startup companies and many law compliance settings) requires a special form of performance management involving learning about the performance implications of uncertain constraints despite limited initial knowledge concerning the constraints.²⁸

^{27.} Steve Blank, What's a Startup? First Principles, STEVEBLANK.COM (Jan. 25, 2010), http://steveblank.com/2010/01/25/whats-a-startup-first-prin ciples/ (describing a startup company as "an organization formed to search for a repeatable and scalable business model"). The corresponding corporate process in shaping corporate law compliance performance is the search for a scalable, repeatedly effective set of law compliance practices.

^{28.} Entrepreneurs are risk takers who often pursue business success in uncertain environments. However, entrepreneurs can be thought of more broadly as developers of new methods for business performance who are compelled to manage business success within uncertain surroundings. Thought of this way, entrepreneurs are not limited to managers of startup companies or other small businesses, but include diverse types of innovators

B. The Central Role of Learning Processes

Learning processes occupy central roles in lean management techniques. The merit of alternative business practices in conditions of high uncertainty turns largely on how much and how fast a company is learning from the practices. Once a regularly reusable path to business success is found, more efficient means to pursue that path can be developed by fine-tuning the initial practices. Until then, learning how to overcome uncertainties and achieve targeted types of business success is its own valuable business goal and the scope of learning achieved is a key measure of performance progress.

Performance amidst uncertain constraints frequently requires learning how to perform well through trials of alternative techniques. Thus, startup company specialists suggest that new firms embrace the uncertainties surrounding them by rationally constructing management practices through trying practices in limited, low risk ways and then retaining and expanding on the successful trials. This leads to iterative processes that identify successful management practices based on repeated cycles of trial steps, testing, and adjustment. Startups need to learn how to conduct business by trying things; yet no trial is worth undertaking if its results cannot be tested. Tentative choices of actions are practical "experiments," with their success to be tested quickly, often in comparison with results from other alternative practices. This sort of rapid testing (and potential failure) of practices is coupled with a willingness to change practices and try again for success. Such testing and refinement should continue until either a company confirms its latest practices work well or company resources are exhausted. The threat of resource exhaustion is always a concern, so there is a premium on "failing quickly"—that is, testing new practices quickly and identifying failures promptly, both so that more iterations can be tried in the search for suc-

who "wor[k] within . . . a human institution designed to create new products and services under conditions of extreme uncertainty." Ries, *supra* note 4, at 8. Law compliance specialists are further examples of specialized entrepreneurs (or management equivalents of entrepreneurs) under this definition. Compliance specialists and other corporate leaders in charge of organizational law compliance programs must shape new compliance practices and promote law compliance amidst substantial uncertainty about the actions needed to meet legal requirements.

cess and so that the amount spent on failed practices is minimized (slow failures generally cost more than quick failures). The results emerging from these sorts of iterative practices reflect "grounded learning"—that is, learning about business practices that match the desires of customers and business environments by gathering information grounded in company experience (much of it painful and adverse) gained in early business activities.²⁹

C. Tentative Commitments to Actions Pending Testing

Lean startup management involves means to rationally advance performance goals when starting with little information about how to achieve successful performance.³⁰ Parties directing performance under these circumstances must try things based on their limited initial information and potentially flawed projections of what will be effective, yet should, if possible, restrict their commitment to the new performance methods until testing confirms that the methods are working. Large commitments to new practices are generally reserved to situations in which prior testing of the same practices under limited use indicates their probable success. Such a combination of tentative action coupled with testing and feedback helps to ensure that a company is putting only effective practices into widespread use, while minimizing false reassurances and wasteful expenditures from widely implemented, but ineffective measures.

^{29.} The key to survival and success for many startups is rapid detection of flawed business practices and a change in direction or "pivot" to new activities based on learning from past failures. The management of such entities evolves with experience towards the pursuit of improved practices. According to leading startup company commentator Eric Ries, "successful startups change directions but stay grounded in what they've learned. They keep one foot in the past and place one foot in a new possible future." Eric Ries, *Pivot, Don't Jump to a New Vision*, STARTUP LESSONS LEARNED BLOG (June 22, 2009), http://www.startuplessonslearned.com/2009/06/pivot-dont-jump-to-new-vision.html.

^{30.} In startup companies, the initial uncertainties about how to operate a successful business stem largely from poor initial knowledge about what customers want and how company products or services should be shaped and delivered to meet those customer desires. In organizational compliance settings, the uncertainties at the outset of working out compliance practices in connection with a new business activity relate to the many sources of legal uncertainty specified at an earlier point in the Article. *See supra* Part II.

D. Differences from Traditional Management in Large Companies

Lean management's treatment of actions as tentative choices and extensive use of testing to inform changes in actions distinguish lean management from common management practices in most large companies. In established firms, company managers frequently try to predict probably successful future practices and then to dedicate substantial resources towards carrying out those practices. Managers are able to adopt new practices with reasonable confidence in the success of the practices because the new practices differ only in small ways from past practices found successful in the same companies. Managers also can call upon the extensive knowledge their companies have acquired in past business transactions about the needs and desires of their customers. The managers can use this information to predict the probable implications and chances for success of new adjustments in business practices. Large entities can commit large resources to new projects (such as the production of a new car model in large quantities) because information derived from their business experience gives them justifiable confidence in the business benefits such commitments will produce.³¹

^{31.} For large concerns making substantial resource commitments to large projects, the points of management concern are often operational efficiency and regularity. Even modest increases in efficiency in a frequently repeated practice can produce substantial corporate benefits. Similarly, practices that involve repeated manufacturing mistakes resulting in defects in numerous product units can be highly damaging. These types of repeated problems are the subjects of their own lines of management principles. One leading exponent of management solutions to problems with massively repeated conduct in large corporations was W. Edwards Deming. Deming advocated working with variations in repeated practices to ascertain the most efficient and error free variation and then constant monitoring of subsequent iterations of the relevant practice to ensure that the best variation was uniformly implemented. Large resources could then be committed to carrying out the best variation, coupled with testing to prevent practices from straying from the best variation. See W. Edwards Deming, Out of the Crisis 1-17 (1988). This type of management approach seeking to regularize the execution of predictably successful practices in large organizations stands at the opposite extreme of predictability from desirable practices in most startup companies where unpredictability about successful performance often makes large resource commitments potentially wasteful and testing of alternative practices undertaken on a small scale a highly desirable means to resolve uncertainties about how to subsequently achieve performance success.

The same type of predictive information is lacking in startup companies, which must work with poorly understood business features such as new technologies or new customer interests. The uncertainties pervasive in startup environments make large resource commitments to practices with highly uncertain chances of success generally unwise. This justifies a different approach to resource commitments and a divergence of startup company management principles from the principles generally governing management in larger companies. Lean startup management diverges from large company management by de-emphasizing the confidence in projections of successful corporate practices often seen in large companies and substituting learning about business practices that achieve success. Uncertainty about how to proceed leads to justifiable caution and humility in startup companies regarding predictions of the future success of startup practices. Instead of confidence based on experience, startups must explore practices by relying on structured iterations of trial and error coupled with intensive performance testing. By adjusting their practices based on the results of this testing, startup companies can find paths to success despite their extensive initial blindness about how to proceed.

E. Foundational Principles of Lean Management

Within this framework of action to resolve and overcome uncertainties, lean startup management shapes business practices in accordance with the following principles:

- (1) Presume failures will be frequent;
- (2) Approach success amidst likely failures through rationally constructed actions that emphasize selectivity (to retain rare successes) and changes (to make improvements in future practices following detected failures);
- (3) Commit resources tentatively and sparingly to any particular course of action (hence the term "lean startup," which refers to lean commitment of resources pending testing, not a small amount of resources per se);
- (4) Complement tentative resource commitments with definitions of success metrics and frequent perform-

- ance measurements to test performance results against those metrics;
- (5) To "fail quickly"—that is, to detect ineffective or dysfunctional performance approaches as quickly as possible so that failing practices can be discontinued promptly and new directions and resource allocations can also be implemented quickly; and
- (6) Presume that practices without metrics for success and corresponding results testing are suspect and should be avoided because there will be no way to distinguish such unevaluable practices from pure waste (i.e., practices consuming resources with no identifiable net benefits in corporate performance).³²

As explained further in the next part of this Article, these same principles can inform and improve compliance program designs. Compliance programs—like startup companies—are often constructed and operated to achieve law compliance results amidst great uncertainty. Successful paths to effective corporate law compliance performance are best discovered and learned through tentative action and testing. In both startups and compliance programs (and in many other environments where successful performance must be managed under highly uncertain constraints), knowledge informing successful enterprise designs is best gained from constructing, operating, and improving management systems via validated learning. Information gained through tentative action and evaluation of results achieved will confirm or "validate" the capabilities of successful compliance practices (and identify and avoid waste on unsuccessful practices). Building compliance practices and programs using this sort of validated learning offers companies their best opportunities to overcome unavoidable legal uncertainties and to implement effective law compliance programs.

IV.

RESPONDING TO LEGAL UNCERTAINTY: UPDATING COMPLIANCE PRACTICES WITH LEAN LAW COMPLIANCE

The systematic management of law compliance practices through lean management provides companies with new tools

^{32.} See Ries, supra note 4, at 8-9.

for responding to legal uncertainty. This Part describes how previously accepted methods for operating compliance programs can be updated to improve these programs and ensure that companies match their changing business practices to their current legal demands and uncertainties.

Legal standards for compliance programs specify that these programs must maintain reasonable levels of corporate law compliance.³³ Perfection is not required, but errors should be rare and generally related only to unpredictable circumstances or unexpected pressures promoting misconduct. Law compliance should be the norm and prevention of predictable misconduct should be both planned and implemented in a generally effective manner.

The legal definitions of due diligence in the operation of compliance programs specify that minimally adequate compliance programs must address four types of compliance tasks in corporate workplaces: (1) compliance risk assessments, (2) compliance direction involving employee conduct standards and motivational measures promoting compliance, (3) compliance monitoring, and (4) compliance practice adjustments (in both compliance programs and compliance-related business practices) following compliance failures or problems.³⁴ These steps contribute to law compliance in related ways:

^{33.} See United States Sentencing Commission, Sentencing Guidelines Manual § 8B2.1(a) (2013) (specifying that a compliance program sufficient to support favorable treatment of a company in sentencing evaluations must reflect "due diligence to prevent and detect criminal conduct" such that "the program is generally effective in preventing and detecting criminal conduct" but "the failure to prevent or detect [a particular offense] does not necessarily mean that the program is not generally effective in preventing and detecting criminal conduct").

^{34.} These four types of activities in compliance programs are reflected in many legal standards describing the minimum features of effective compliance and ethics programs. For example, the compliance program standards incorporated in the United States Sentencing Guidelines—which have had extensive influence in shaping other government standards for compliance programs—specify that a minimally adequate compliance program must have the following features:

Due diligence and the promotion of an organizational culture that encourages ethical conduct and a commitment to compliance with the law [in an effective compliance and ethics program] require the following:

⁽¹⁾ The organization shall establish standards and procedures to prevent and detect criminal conduct.

- (2) (A) The organization's governing authority shall be knowledgeable about the content and operation of the compliance and ethics program and shall exercise reasonable oversight with respect to the implementation and effectiveness of the compliance and ethics program.
 - (B) High-level personnel of the organization shall ensure that the organization has an effective compliance and ethics program, as described in this guideline. Specific individual(s) within high-level personnel shall be assigned overall responsibility for the compliance and ethics program.
 - (C) Specific individual(s) within the organization shall be delegated day-to-day operational responsibility for the compliance and ethics program. Individual(s) with operational responsibility shall report periodically to high-level personnel and, as appropriate, to the governing authority, or an appropriate subgroup of the governing authority, on the effectiveness of the compliance and ethics program. To carry out such operational responsibility, such individual(s) shall be given adequate resources, appropriate authority, and direct access to the governing authority or an appropriate subgroup of the governing authority.
- (3) The organization shall use reasonable efforts not to include within the substantial authority personnel of the organization any individual whom the organization knew, or should have known through the exercise of due diligence, has engaged in illegal activities or other conduct inconsistent with an effective compliance and ethics program.
- (4) (A) The organization shall take reasonable steps to communicate periodically and in a practical manner its standards and procedures, and other aspects of the compliance and ethics program, to the individuals referred to in subparagraph (B) by conducting effective training programs and otherwise disseminating information appropriate to such individuals' respective roles and responsibilities.
 - (B) The individuals referred to in subparagraph (A) are the members of the governing authority, high-level personnel, substantial authority personnel, the organization's employees, and, as appropriate, the organization's agents.
- (5) The organization shall take reasonable steps—
 - (A) To ensure that the organization's compliance and ethics program is followed, including monitoring and auditing to detect criminal conduct;
 - (B) To evaluate periodically the effectiveness of the organization's compliance and ethics program; and
 - (C) To have and publicize a system, which may include mechanisms that allow for anonymity or confidentiality, whereby the organization's employees and agents may report or seek guidance regarding potential or actual criminal conduct without fear of retaliation.
- (6) The organization's compliance and ethics program shall be promoted and enforced consistently throughout the organization through (A) appropriate incentives to perform in accordance with the compliance and ethics program; and (B) appropriate disciplinary measures for engaging

- (1) Risk Assessments establish goals and guidance for subsequent law compliance activities. These risk assessments help to identify both the types of actions that company employees will need to take to attain law compliance and the areas that companies should emphasize in their law compliance programs and monitoring.³⁵ The evaluation of compliance risks entails examination of both legal requirements applicable to contemplated corporate activities and further evaluations of settings or actions in corporate environments where these requirements are most likely to be violated. Risk assessments conducted in this way allow companies to prioritize potential legal violations from the perspective of the corporations involved, with the most serious types of misconduct specified as highly likely misconduct with large adverse consequences for the company involved. Once a company's most serious legal risks are understood in these terms, the resulting risk assessments establish targeting criteria for focusing and prioritizing compliance program efforts and resource allocations. Risk assessments are the primary vehicles for tailoring compliance efforts to company-specific threats of illegal activities.
- (2) Employee Conduct Direction involves company responses to compliance risks in the form of conduct standards and training to inform employees about how to carry out compliance-related work activities.³⁶ Direction regarding law compliance should be coupled with measures incentivizing employees to undertake the necessary actions, including positive rewards for completion of legally required tasks and discipline and other negative consequences for illegal actions and actions violating compliance program

in criminal conduct and for failing to take reasonable steps to prevent or detect criminal conduct.

⁽⁷⁾ After criminal conduct has been detected, the organization shall take reasonable steps to respond appropriately to the criminal conduct and to prevent further similar criminal conduct, including making any necessary modifications to the organization's compliance and ethics program.

Id. § 8B2.1(b).

^{35.} See id. § 8B2.1(c) & cmt. 7 (2013); supra note 23, § 15.03.

^{36.} See supra note 33, §§ 8B2.1(b)(1), (2), (4); supra note 23, § 15.02[2][a].

standards. The overall objective of these directive measures is to guide individual employees (with both information and incentives) towards completion of compliance-related activities. This is accomplished by helping employees to fully understand the actions they need to take to advance corporate law compliance and by giving them substantial motivations to take these actions.

(3) Compliance Monitoring entails measuring and analyzing compliance-related employee conduct. This typically involves evaluating employee actions against applicable legal requirements and against additional company standards (which sometimes require employee actions that promote corporate law compliance, but which are not legally required of themselves).³⁷ This type of monitoring serves two functions within law compliance systems.

First, it complements incentive systems promoting compliance by employees. If employees know that their actions will be monitored and rewards or discipline allocated in accordance with monitoring results, promises of differential employee treatment based on compliance-related results will have force. Without compliance monitoring, promises of differential treatment will be hollow (and somewhat cynically received). Employees will be unlikely to pursue compliance seriously and diligently if compliance monitoring is weak or its results are overlooked by corporate managers. If employees feel that compensation will be allocated regardless of compliance-related performance because such performance is not monitored, then announced incentives regarding law compliance are unlikely to influence employee behavior.

Second, compliance monitoring supports assessments of the effectiveness and wastefulness of compliance practices with an eye towards possible improvements. Monitoring supports learning about the effectiveness of compliance system components; absent such learning, a company may be mistakenly satisfied with ineffective compliance practices until a major incident of illegal conduct reveals its error. Learning about the effectiveness of compliance practices before a company experiences an expensive compliance gap is fundamentally important in

^{37.} See supra note 33, § 8B2.1(b)(5); supra note 23, §§ 15.02[2][d], [f].

- law compliance systems as it provides means to weed out ineffective practices and to determine when formerly effective practices are no longer serving their intended purposes.
- (4) Conduct Adjustments entail corrective follow-ups to compliance monitoring findings or other developments that indicate compliance program deficiencies (such a major incident of publically revealed misconduct).³⁸ To keep compliance program practices matched to current compliance demands and challenges, company managers must not only monitor existing practices to search for compliance failures, but must also try to improve practices and compliance performance where they find compliance problems. These improvements are needed to maintain reasonable compliance levels in light of growing corporate knowledge about effective and ineffective practices and to avoid wasteful expenditures on meaningless practices.

Adjustments in light of compliance program experience will typically involve two types of actions. First, when compliance monitoring reveals a problem, additional steps should be taken to design and implement improved practices. These additional steps should include evaluations of the sources of the detected problem and of alternative corporate practices that might better deal with the problem. Second, a company having detected compliance deficiencies and developed a plan for improvements will want not only to implement the improvements, but also to initiate enhanced monitoring to ensure that the new improvements are fully carried out and that they are more effective than their predecessors.

Each incident of misconduct or compliance program failure is a potential learning experience, revealing compliance system weaknesses and providing an opportunity to learn about the sources of program weaknesses and means to do better in future corporate activities. The combination of altered actions to improve compliance performance and enhanced assessments to see if the changes are effective will help a company to learn from its past compliance mistakes and to evolve its practices in light of the full range of information that can be gleaned from its

^{38.} See supra note 33, § 8B2.1(b)(7); supra note 23, § 15.02[2][f].

mistakes. This type of learning and improvement based on experience is a basic component of lean management practices as well. In both corporate compliance settings and the startup company environments where lean management has been proven successful, paths towards successful performance are often highly unclear at the outset, but can be found through learning from performance errors via carefully structured programs of monitoring, evaluation, and performance adjustment.

The four types of activities summarized above are widely recognized as necessary features of well-constructed compliance programs.³⁹ However, the means to implement these features in particular companies are often unclear due to the types of legal uncertainties noted earlier. Confronted with legal uncertainties in carrying out their company's business objectives, how should corporate managers plan and implement compliance program features to achieve reasonable compliance levels despite the surrounding uncertainties? In short, how can company managers proceed rationally, effectively, and efficiently to implement generally effective compliance practices when these practices are only seen vaguely through a fog of legal uncertainty?

Lean management provides corporate managers with an answer. It defines ways to plan and implement compliance programs that will achieve reasonable compliance levels despite the surrounding legal uncertainties. Using lean management, uncertain compliance ends can be pursued effectively by adopting compliance practices in tentative steps followed by trial, error, revision, and retesting. At its heart, lean management is a process of learning how to proceed despite initial uncertainty, starting with informed guessing about an initial practice in some enterprise, coupled with testing of whether the tentatively chosen action was successful. ⁴⁰ Where tests con-

^{39.} For an overview of the basic features of effective law compliance (and the legal standards governing these features), see *supra* note 23, §§ 14.01-.03, 15.01-.03.

^{40.} Eric Ries summarizes the validated learning at the heart of lean startup management as follows: "Startups exist not just to make stuff, make money, or even serve customers. They exist to *learn* how to build a sustainable business. This learning can be validated scientifically by running frequent experiments that allow entrepreneurs to test each element of their vision." Ries, *supra* note 4, at 8–9.

firm success, the practice is continued (and perhaps applied more broadly for use in other parallel situations and higher volumes). Where tests suggest failure, the initial practice is altered or discontinued, both to avoid wasting resources on ineffective measures and to try to do better in subsequent actions. In this way, lean management combines initial attempts at successful compliance program designs (involving practices crafted using general domain expertise such as information about the generally applicable requirements of laws known to govern company activities) with added learning of new information about the nature of context-specific compliance needs gained via experience with the initial practices.

By building (or more accurately finding) successful practices via this learning process, companies can construct compliance practices that are matched to their practical and business-specific compliance risks even when they cannot fully describe those risks and the means to meet them at the outset. Lean management defines a process for intelligently moving forward amidst partial compliance darkness. The keys to success in the iterative world of lean management are quick trials, frequent assessments of success or failure, and constant willingness to learn and adjust practices in response to performance evaluations. The next Part of this Article describes particular steps corporate leaders can take to incorporate lean management practices in the design, implementation, and evaluation of corporate law compliance programs.

V. Constructing Compliance Programs Incorporating Lean Management

A. Validated Learning in Lean Compliance Management

Validated learning lies at the heart of lean compliance management. Validated learning in management systems is a rationally constructed form of trial and error—perhaps better thought of as "trial and improvement." In management practices based on validated learning, steps initially expected to be successful in completing a task are tried, tested for success, and retained or altered in light of this testing.⁴¹ Such a process promotes learning about the merit of tentatively chosen ac-

^{41.} As described by Eric Ries:

tions. It achieves learning by validating—that is, measuring and evaluating—the success of actions. The learning achieved through these processes can inform both choices about whether to continue old practices and further choices about how to construct and operate new practices.

Validated learning builds on managers' best estimates about practices that are predicted to be successful in achieving desired performance results. Practices are adopted not as fixed measures, but as learning tools.⁴² Monitoring and evaluation systems seek to learn both whether the initially implemented practices were good choices (by evaluating the success of the practices) and whether there are better practices for achieving the same ends. The failure of some practices (and the need to replace partially successful practices with more successful ones) is assumed in these processes. High quality management practices emerge from these learning processes. Initial guesses about successful practices are superseded with practices designed with improved knowledge based on results achieved. The evolution of effective management practices through this type of validated learning is a cyclical process based on trial and error, and testing.

The key to the success of validated learning is action, coupled with testing and more action. As President Franklin Delano Roosevelt observed in describing how government leaders should confront the fundamental economic unknowns of the

Validated learning is not the after-the-fact rationalization or a good story designed to hide failure. It is a rigorous method for demonstrating progress when one is embedded in the soil of extreme uncertainty in which startups grow. Validated learning is the process of demonstrating empirically that a team has discovered valuable truths about a startup's present and future business prospects It is the principal antidote to the lethal problem of achieving failure: successfully executing a plan that leads nowhere.

Id. at 38.

^{42.} The degree of new learning resulting from a practice is a measure of quality of that practice. For new enterprises (or new compliance practices) where exploring for effective practices is a primary goal, the most valuable practice in a given context may be the one that produces the greatest learning in the least time. *See id.* at 93–94. For compliance systems in early stages of operation (or in operation under changed circumstances where old knowledge about effectiveness may not apply), the most valuable practice will often be that which can be quickly proven as either effective or ineffective.

Great Depression and promote renewed prosperity through new types of previously untried and unproven government social programs: "It is common sense to take a method and try it. If it fails, admit it frankly and try another. But above all, try something." Roosevelt might have been speaking of the proper course of organizational action in the face of any previously unfamiliar and unsolved organizational problem. These situations are best addressed through a preference for positive action, cautiously pursued. The remainder of this Part describes how a bias towards action of the sort advocated by Roosevelt—coupled with practice testing and possible practice revisions—can guide law compliance programs and translate techniques pioneered in startup companies into lean law compliance management.

B. Elements of Lean Compliance Programs

1. Objectives of Lean Compliance

Lean compliance practices based on validated learning should promote a number of compliance goals, including:

- (1) Ensuring that corporate employees take positive actions needed to achieve law compliance and prevent offenses;
- (2) Avoiding waste by minimizing iterations of law compliance practices that are ineffective;
- (3) Measuring and documenting compliance practices and results to establish baselines for later compliance measurements and to provide proof of the effectiveness of compliance practices (for both inside reviewers and outside evaluators such as government officials); and
- (4) Learning and accumulation of information about compliance program performance that supports improvements in compliance practices through the adjustment of partially effective or ineffective practices.

^{43.} Franklin D. Roosevelt, Address at Oglethorpe University (May 22, 1932).

2. Lean Compliance Cycles

a. Where to Apply Lean Compliance Methods

Lean compliance methods are potentially useful in managing many features of compliance program performance. These methods will be valuable wherever uncertainty about the steps needed for compliance leaves the course of action significantly unpredictable. Valuable learning to resolve compliance uncertainties and advance compliance program improvements can be realized by using lean management in each of the four major compliance management areas mentioned earlier—that is, by applying lean management to (1) risk assessments, (2) employee direction, (3) conduct monitoring, and (4) practice adjustment.

Validated learning via lean compliance methods can inform the construction, implementation, and improvement of numerous compliance practices by establishing parallel lean compliance cycles assessing compliance practices in multiple areas simultaneously. For example, new criteria for risk assessments triggered by enactment of a new law might be tried and evaluated at the same time that a company implements and evaluates new compliance training materials used to direct employees regarding compliance-related activities. Risk evaluation criteria found to be inadequate might be updated in subsequent compliance activities, even as training materials found unclear or unpersuasive are reworded at the same time. The completion of parallel practice testing in this way can accelerate learning about compliance practices that do and do not work in corporate environments and avoid delays that may otherwise keep ineffective practices in place. By applying lean compliance management cycles simultaneously to law compliance practices in all four of the areas mentioned, a company can ensure that its practices evolve as quickly as possible in all of these areas to match the company's current legal uncertainties and law compliance challenges.

b. Features of a Lean Compliance Cycle

Lean management practices—derived from proven practices applied in the context of startup company management⁴⁴—

^{44.} See generally Ries, supra note 4, at 74–78; Steve Blank & Bob Dorf, The Startup Owner's Manual (2012).

involve cycles of four important steps for managing any important, yet uncertain activity: (1) build, (2) test, (3) learn, and (4) revise, if needed.⁴⁵ This sequence produces validated learning and evolutionary improvements of the activity under management. In business settings, lean management methods are used to learn and validate information about successful business practices and how they can be replicated and widely implemented.⁴⁶ In law compliance systems, validated learning can help company managers answer such key compliance questions as the following:

- (1) Does our company understand the means to accomplish compliance in connection with regular business activities?
 - a. Is the means repeatable?
 - b. Can we prove it is repeatable?
 - c. Can we accomplish the required steps for compliance with current practices?
- (2) Have we tested necessary training, monitoring, and other compliance practice rollout features?
- (3) Are we confident that we can scale one-time compliance practices into widely and regularly applied methods throughout similar business activities?
- (4) Are the anticipated widespread practices sufficient to meet compliance obligations in all of the legal jurisdictions and foreseeable future conduct settings that the company will operate in?⁴⁷

^{45.} What appears here to be a four-part cycle is actually a three-part process to learn about the features of a successful compliance practice (as reflected in the build, test, and learn steps in the cycle), coupled with a possible additional build step (and possible new cycle) if learning suggests a need for change because existing practices are not working. Subsequent build steps after a new practice is adopted for the first time are often revisions to older practices based in part on information gathered to that point through experience with an older counterpoint practice. Hence, these later build steps, which focus on either improvements to past practices or more fundamental rejections of those practices to significantly shift or "pivot" to a new approach, are referred to here as actions to revise practices. The emphasis on revision is a reminder that these later building (or rebuilding) steps are informed by experience with prior practices. See Ries, supra note 4, at 74–78.

^{46.} See Blank & Dorf, supra note 44.

^{47.} Cf. id. (describing similar business performance questions that lean management practices are designed to answer in startup companies).

By answering these sorts of questions through validated learning, a company can construct validated compliance programs—that is, corporate compliance practice programs implemented with assurance that practices within the programs have been validated as generally effective in the settings where they are used.

Lean compliance management recognizes that an understanding of compliance challenges and methods will change and improve over the course of a lean management cycle. The design of revised practices at the end of a cycle will benefit from initially possessed design knowledge plus new knowledge gained in testing processes. However, even the revised designs that result are just tentative choices. The revision step of one cycle is the build step of the next. The cycles are continuous and sequential. The learning underlying lean compliance is never finished since the circumstances and uncertainties affecting compliance demands are changing and need repeated reconsideration over time. The best that companies embracing lean compliance management can expect is that their learning processes and frameworks will keep up with changing uncertainties, matching their current compliance practices to current compliance challenges and uncertainties.

Each of the steps in a lean compliance cycle involves features that support the overall learning achieved via lean compliance. The remainder of this subpart describes how lean cycle components contribute to validated compliance learning and lean compliance.

3. Lean Compliance Step 1: Build

The first step in a lean compliance cycle is to use existing knowledge to build an implementable and testable set of compliance practices. This involves the specification of compliance practice features that are expected to be successful in carrying out some compliance function. The initial version of a new practice will usually be based on the well-informed hunches of compliance experts or other corporate managers about what will be effective. Later, after compliance experi-

^{48.} The object of this building is to create—that is, to specify in implementable terms—the compliance program features or practices that are quickly testable in later use so as to establish a build-measure-learn feedback loop. *See* Ries, *supra* note 4, at 93.

ence and results are accumulated, revised versions of the same practices can be created based on new, validated learning from experience.

a. What to Build: Focusing on Compliance Value

A fundamental question underlying the building of compliance practices is what should the practices address? The answer is that practices should address aspects of corporate conduct that have identifiable compliance value in that they contribute in an identifiable way to increasing the likelihood of corporate law compliance. This often means contributing to adoption of compliance-related actions by corporate employees. If a particular practice or practice element cannot be linked to this end result, then its value is suspect and the practice may be just a waste of time and resources. The value of initially implemented program elements in promoting compliance will be projected by compliance experts and later reassessed based on corporate experience with the elements. This value confirmation process involves ongoing learning—experience with compliance practices will help a company learn what works in its workforce. Compliance program development focusing on compliance value as a quality measure evidences corporate managers' commitment to meaningful compliance efforts. It indicates that managers will be satisfied only with compliance practices that have positive impacts on compliance results. It signals a willingness to critically evaluate practices, to reject those practices found ineffective, and to improve partially effective practices through continuous fine-tuning.⁴⁹

The minimum compliance program unit worthy of separate validated learning is any element that appears likely to have a material impact on corporate compliance if the element fails. A material impact is one that will meaningfully increase company liability or otherwise result in harmful corporate consequences. The likelihood of a given compliance element being material will therefore depend on both how likely it is that a failure of that element will lead to illegal corporate conduct and the seriousness of that conduct as reflected in corporate fines or other adverse corporate consequences. Material compliance program elements are program features that

^{49.} See id. at 119-21.

a company relies on to prevent or stop serious harm from legal liability and related threats. These material compliance program elements each have separate value—making them the equivalents of minimum viable products in startup companies. Each material compliance program element should be the target of testing and validated learning to facilitate rapid information gathering and improvement regarding these important compliance program elements and to ensure the value expected from the elements is realized.

A focus on the value of program elements should inform both design objectives and measurement criteria for compliance programs administered under lean compliance principles. Compliance practices should be designed and implemented with the object of enhancing compliance value. In later testing, the same compliance practices can be evaluated to determine if they have realized their targeted value. Note that completion of compliance tasks as specified is not enough—this merely indicates that efforts have been carried out in the manner directed, not that these efforts have achieved valuable results. Accepting effort as the equivalent of results is a generally dangerous practice. This is a bit like saying that if its wheels go around, an automobile is a success. Rather, successful designs must be compliance-enhancing and achieve valuable ends by producing positive law compliance results. By comparison, an automobile is valuable and desired by consumers primarily because it is successful in such practical tasks as transporting parties to activities and carrying out other life-enhancing tasks. Value lies in results achieved—that is, in realizing results that users value. For compliance programs, value lies in liability and harms avoided. The corpora-

^{50.} For startups, a minimum viable product (MVP) is the smallest product unit that has value to company customers and that can therefore be offered to potential customers for sale and beginning of a build-measure-learn feedback loop. *See id.* Generalized for broader use, a MVP is any item or practice element that contributes to something of value where the contribution of the element can be separately measured and evaluated. Such a separate element provides the opportunity to start a build-measure-learn feedback loop regarding the use of the element. *See* Eric Ries, *Minimum Viable Product: A Guide*, Start Up Lessons Learned (Aug. 3, 2009), http://www.startuplessonslearned.com/2009/08/mini-mum-viable-product-guide.html. In the context of compliance programs, the MVP equivalent is the smallest compliance program element that has a material (and hence valuable) impact on compliance results.

tions that operate the programs are the users and the value at stake is measured in terms of successful corporate liability and harm prevention. Compliance practices should be built and evaluated in terms of their identifiable contributions to corporate value as measured from this perspective.

The design of compliance program elements should facilitate compliance testing.⁵¹ Early versions of compliance program elements will establish performance baselines against which later program progress and improvements can be measured. Design features of compliance practices may make the measurement of results achieved more or less difficult. For example, compliance program elements can facilitate related evaluations if the elements include fact gathering and reporting on metrics that can be used in later evaluations of the same program elements. Including such measurement-enhancing features in program elements frequently has its own compliance value since such measurement features promote careful evaluations and associated validated learning.

b. Working with Many Small Alternatives

In constructing features of compliance programs, it will often be worthwhile to separately focus on and fine-tune many small alternative compliance practices. Compliance program design and improvement should proceed separately for each minimally valuable program element that can be separately implemented, studied, and improved. Multiple alternative versions of these small components can be used in parallel, leading to a great deal of learning about effectiveness in a short time. This fine-grained approach will supply the necessary informational underpinnings for program testing, fluidity, and rapid improvement.

Rapid improvement in compliance program practices will often be important because initial program versions will be dysfunctional or only partially functional. The numerous uncertainties surrounding law compliance in some areas mean that many initial guesses about proper methods will be wrong. Fear of less than perfect results need not stall compliance attempts, however. A practice need not be perfected before it is implemented and tested—indeed, speed is often more impor-

^{51.} See Ries, supra note 4, at 119.

tant than pre-implementation attempts at perfection. A partially effective practice implemented immediately often achieves better results than no practice at all. Partial liability prevention is better than no prevention. Quick implementation also advances a company rapidly towards learning and improvement regarding a practice, allowing the company to later implement a better version of the practice without long delay.

Use and testing will often identify areas where improvements are needed. Time and resources spent on attempts at perfection before implementation may just be wasteful. Small-scale compliance program changes, implemented only broadly enough to gain performance results and feedback, will often be helpful as learning tools. These can help to focus subsequent improvement efforts and use the resources applied to those improvements more effectively. Thus, minimally adequate quality at the outset is often good enough, given that initial practices are learning tools and intended to be revised based on early experience with the practices. Early versions of practices can be tested for desirable and undesirable features in action, leading to informed decisions about which features to keep and which to discard in later revisions of the practices.

At the same time, a test version of a practice should be sufficiently complete and effective to ensure that the new features in that version are given a fair trial. Meaningful testing of the different impacts of new features will require that practices with and without the features be given a chance to operate and show their effects. Comparisons of the results will reveal the incremental value (if any) of the new features. One way to ensure a meaningful trial is to have implementation of trial versions of new practices overseen by specialized compliance personnel who can see both that new practices are completed as intended and that information is carefully collected on the results achieved by the alternative practices.⁵² This information

^{52.} Such a testing assistant or "concierge" for testing guidance will not be needed when validated practices are rolled out on a broader scale. Nonetheless, the initial use of a concierge can ensure that a new practice is used completely and thoroughly in testing, thereby ensuring the results achieved reflect the full potential of the new practice, even if later care may be needed to ensure that the practices is used similarly and the full potential also realized in widespread use. *See id.* at 99–103 (describing the use of concierge-aided testing to ensure full, quick use of new and complex practices in test environments).

on results achieved is what practice designers and administrators will need in considering possible changes in the practices.

c. Deploying Iteratively and Experimentally

Ideally, compliance system changes subjected to testing should be small and tentative, with the expectation that components of systems will be changed further based on testing results. Each version of a system element (or variation from a past version) should be treated as an experiment to determine the desirability of that version. Once a system element has operated long enough to produce results, its merit can be assessed with a view to making one of three choices about its future: (1) if the new practice is as effective as can be expected for the present, the practice should be kept in place (as well as rolled out to broader use in parallel operations if the new practice was initially adopted in limited settings), (2) if the practice has some meritorious features, but also some flaws, it should be redesigned and retested in its improved form, or (3) if the practice is highly ineffective, it should be scraped altogether and a "pivot" to a fundamentally new approach should be used to create a substitute practice designed from scratch (perhaps by new designers who are not wedded to the past design).

The experimental quality of program features when first used implies two related qualities of new program features. First, since there is a substantial risk that new features will not work, they should be used on a small scale if possible (with other parallel situations handled either with older, more fully tested practices or with monitoring of the new features by compliance specialists and legal experts to ensure that law compliance goals are satisfied while the new practices are tested and proven reliable). Second, implementation and testing should be accomplished quickly if possible, both to avoid long-term reliance on ineffective practices and to help to identify and expand the use of effective practices as quickly as possible.⁵³

^{53.} The desirability of quickly tried and evaluated practices underlies the advice that a successful startup company should "fail quickly." This advice does not advocate failure per se; rather, it recognizes that a high degree of failure is unavoidable, but better accomplished quickly rather than slowly. Quickly determined failures enable quickly implemented moves to new ac-

d. Deploying Changes Frequently

Frequent deployment and testing of new versions of compliance practices can realize several added advantages. Rapid changes promote quick learning about both the features of compliance challenges and the characteristics of successful responses. Even if a given version of a compliance feature fails, the reasons why it failed may help corporate leaders to redesign the practice, leading to an effective version in the next iteration. Findings about both compliance demands and operational responses are products of validated learning in lean compliance systems; quicker testing will often produce more such knowledge. Frequent testing also allows yesterday's unaltered practices and results to be used as baselines for comparisons to today's altered practices and results, with minimal concerns that time-dependent changes in surroundings account for differences in results. Rapid changes can also permit the quick testing of greater numbers of variations in practices.

Of course, rapid testing can be costly, and at some point the additional amount being learned by conducting numerous tests of a given compliance program feature will not be worth the costs of conducting additional tests. This will be the case where the costs of additional tests exceed the projected advantages of the information expected to be gained from the tests. There may also be additional reasons not to increase testing frequency. For example, where employee training has focused employees on one aspect of compliance or one means of addressing compliance requirements, shifting training content quickly may produce more confusion than helpful guidance. In such a setting, change creates new risks that must be taken into account in interpreting testing results and in deciding whether frequent testing of alternatives is worthwhile. The mere act of frequent testing may diminish the value of this type of training and employee guidance, imposing costs that may overshadow the information-gathering benefits of testing. The costs of conducting frequent testing suggest that such testing should be reserved for a few practices that are expected to have large impacts on compliance results (which will justify the high costs of frequent testing).

tions (or "pivots"), leading to second and sometimes third, fourth, or fifth chances to get practices right. See id.

e. Deploying Competing Alternatives with Parallel Testing

The experimental nature of implementations of new practices—coupled with the desirability of testing the efficacy of new practices quickly—suggests that it may often be desirable to implement multiple versions of new practices simultaneously such that two or more different versions are used and tested in parallel under similar conditions. This parallel implementation and testing can be followed by comparisons of the results produced by the alternatives after a period of operation. Parallel implementation facilitates two types of new information gathering. First, it gathers information on whether either of the implemented approaches is effective in furthering the compliance objectives at stake. Second, it provides comparative information on which of the approaches is more effective or less costly, which can be valuable in selecting which version should go forward in broader rollouts. Even two parallel failures of compared practices may be helpful as comparisons of the failures may identify one practice version as being somewhat more effective than the other and thereby point to possibly desirable directions for redesigns of the practice at issue.

Parallel rollouts of alternative compliance practices should be constructed and implemented with their experimental purposes in mind. Rollouts on a limited basis of two practices that differ in one narrow respect can test the differential impact, if any, of that specific difference. Conversely, parallel rollouts of practices reflecting very different approaches to solving a given compliance problem or to promoting a particular compliance goal can identify which major design approach deserves further attention and refinement. This approach to competing rollouts envisions that working out the details within an initially promising design direction will still require additional effort and testing, perhaps via more narrowly chosen design differences (for example, with alternative practice versions having different design features within the same design direction as the initially successful design).

f. Incorporating Metrics and Measurable Features

Using rollouts of new practices as experimental means to gather compliance performance information implies that measurements and evaluations of results are essential parts of the rollouts. This further implies that no new practice should be implemented without having an associated metric for measuring the quality of its results. Practices that have no defined metrics for measuring their success will have unknown compliance value even as companies expend (and perhaps waste) extensive resources on the practices. The applicable measures of success for a practice should be understood at the outset of the design of the practice so that the features of the practice can be tailored to produce the desired results. Also, compliance practices should be crafted to produce measurable results that can be evaluated in law compliance accountability systems within the relevant corporation.

A practice without measurable results should be viewed as suspect and generally avoided. Such a practice is an invitation to corporate waste without meaningful compliance-enhancing results. Practices with no indicators of success may have no compliance impacts yet are certain to have concrete implementation costs as they are designed, established, and maintained. The acceptance of established practices as adequate may simply cover up hidden waste—that is, payment of implementation costs without getting any results.

In considering compliance metrics, the measurement of efforts will not be enough (and may be actively misleading). The mere execution of a compliance practice in accordance with its intended sequence of steps is not an adequate measure of success. This is a bit like trying to measure academic success by measuring student attendance. Attendance is a generally helpful contributor to academic success and measuring attendance accordingly measures a possibly relevant input to academic success. However, measuring attendance is not the same as measuring an actual indicator that successful academic results (reflected in incremental learning) have been achieved. In the context of compliance programs, measuring completion of practices is the equivalent to measuring attendance—both are contributors to success, but success may still be absent even if these inputs are present. The sole results of compliance practices that will ultimately matter to firms—and which should accordingly be the focus of compliance metrics—are (1) the completion of legally required corporate actions, and (2) the completion of other actions that increase the likelihood of corporate compliance in concrete, verified ways.

The need to measure impacts will dictate some design features and implementation methods for compliance program components. For example, in designing compliance training sessions it will be desirable to build in measurements of employee understanding of legally required practices. The resulting measurements (and the data on training effectiveness reflected in those measurements) will be useful in testing the effectiveness of different training programs in imparting useful compliance guidance to employees. If evaluations of employee knowledge are not built into the completion of training programs, there may be little means to test whether training efforts are having any net effects on employee knowledge and enhancing compliance in any meaningful way. Building information gathering features into compliance practices at the outset facilitates testing and evaluation steps at later stages in lean compliance cycles.

g. Use Lean Compliance to Shape Seven Key Compliance Program Elements

Evaluations of compliance programs as management tools for promoting corporate law compliance have indicated that these programs should include seven key types of practices to ensure generally effective results.⁵⁴ The seven types of practices recognized in government standards as minimum features of effective compliance and ethics programs⁵⁵ include the following:

^{54.} See United States Sentencing Commission, Report on Additional Visory Group on the Organizational Sentencing Guidelines 4 (2003), available at http://www.ussc.gov/sites/default/files/pdf/training/organizational-guidelines/advgrprpt/AG_FINAL.pdf (noting that these seven types of compliance program practices, as described in the United States Sentencing Commission's standards for compliance and ethics programs, reflect the "essential attributes of successful compliance programs revealed by many years of program development and testing"). See also id. at 51–91 (describing the functional purposes of the seven types of compliance program elements and the experience of companies with these elements). The author served as a member of the Advisory Group that authored this report and that formulated recommendations leading to the Sentencing Commission's standards.

^{55.} Most government standards for evaluating law compliance programs have incorporated program requirements similar to those specified in United States Sentencing Commission's organizational sentencing guidelines. *See supra* note 33, § 8B2.1 (describing minimum features a corporate

- (1) Compliance standards and procedures reasonably capable of reducing the prospect of criminal activity;
- (2) Oversight of compliance programs and practices by high-level personnel;
- (3) Due care in delegating substantial discretionary authority affecting compliance;
- (4) Effective communication to all levels of employees regarding compliance practices and policies, including related training;
- (5) Reasonable steps in carrying out business activities to achieve compliance, including systems for monitoring, auditing, and reporting suspected wrongdoing without fear of reprisal;
- (6) Consistent enforcement of compliance standards including disciplinary mechanisms; and
- (7) Reasonable steps to respond to and prevent further similar offenses upon detection of a violation.⁵⁶

Lean compliance methods can aid in the design and improvement of all seven of these types of practices. The effectiveness of a particular company's implementation of each type of element will be uncertain until the element is tested and its effectiveness is established via validated learning. Changes in legal demands or compliance surroundings will create needs for periodic revalidation of legal practices. Even where practices in one or more of the seven areas have been sufficient in the past, new business circumstances or legal requirements may render them inadequate for the future. Hence, uncertainty about how to effectively pursue law compliance will be a constant threat across all of these seven areas and lean compliance management will be a valuable tool to resolve this uncertainty in all seven areas. For this reason, lean

compliance and ethics program must have to justify consideration of the program as a mitigating factor in determining a corporate sentence for a federal crime).

^{56.} See Paula Desio, An Overview of the Organizational Sentencing Guidelines (2007), available at http://www.ussc.gov/Guidelines/Organizational_Guidelines/ORGOVERVIEW.pdf (analysis by the Deputy General Counsel of the United States Sentencing Commission noting that these seven features are recognized as essential features of corporate compliance programs for federal sentencing purposes); supra note 33, § 8B2.1 (describing the seven factors addressed in the text as necessary features of effective compliance and ethics programs).

compliance management (tailored to the details of the seven key areas and further to the business circumstances of individual companies) should be an ongoing tool for compliance program design and perfection across diverse compliance program features.

4. Lean Compliance Step 2: Test

a. Testing Basics

Testing within a lean law compliance cycle should assess whether various compliance practices are serving their intended purposes.⁵⁷ Testing may also evaluate whether one practice is more or less effective than a competing practice.⁵⁸ Comparative testing of alternative practices is sometimes called "A-B testing" or "split testing" on the grounds that it entails implementing two alternative approaches to completing a single task (approach A and approach B) and then comparing the results achieved by the two approaches. The approaches compared may both be new or one may be an old practice tested against a revised version of the same practice.

Practice testing can address many details of compliance programs. For example, a company might conduct A-B testing of alternative wordings of key compliance standards or procedure descriptions by giving alternative wordings to different employees, with the relative merit of the different wordings evaluated in terms of how employees receiving each wording responded when asked how they would act when confronted with various situations raising compliance problems. The desirability of their responses would indicate how well each of the wordings had informed and influenced their thinking about needed compliance steps. If one wording produced better compliance results (or at least caused employees to choose compliance-promoting actions more often), then that wording

^{57.} Under lean management principles, the initial use of a new practice is an experiment to determine the practice's actual effectiveness (which is not presumed, but rather must be validated via testing). Hence, the goal of testing is to determine whether a compliance program feature designed to contribute to compliance by achieving result X is actually producing that result and how well (particularly in relation to other means, if any, of attaining X). See Ries, supra note 4, at 94 (describing the trial use of new product or service features to test the success of business practices).

^{58.} See id. at 136-37.

of the compliance standards would merit wide-scale implementation over the less effective language. This type of testing of the impact of alternatives can be implemented for many program features simultaneously, providing quick feedback on the effectiveness of numerous program details.

b. Risks of Testing Gaps

Where the success of particular compliance practices is critical in achieving corporate compliance and in avoiding large penalties for illegal employee conduct, compliance practice testing is particularly important. Testing gaps leave company leaders with no more than unproven hopes for good results in the face of clear risks of large corporate losses. The mere hope for success in the face of these large compliance uncertainties is an unwise and often wasteful practice. It is a bit like painting in the dark—who knows if one is creating an attractive painting unless one can see? Testing for compliance results is the equivalent of seeing what one is painting—it provides necessary feedback on what has been done and on whether it is reasonable to go on doing what has been done so far or whether radical changes are needed.

The usefulness of testing results often depends on the quality of the metrics used. Merely testing and evaluating practices against some metrics is not helpful if the metrics do not correspond to indicators of compliance success. Measuring that a party has completed a large quantity of a useless activity is not the same as measuring whether the party has made meaningful progress towards a specific goal like corporate law compliance. This is a bit like measuring how many steps a person has taken in trying to reach a particular city without measuring whether the steps were taken in the right direction such that the party has moved closer to the city of interest. Effort is not necessarily the same as results;⁵⁹ only compliance results or indicators of such results (that is, measurable items strongly correlated with desired compliance results) are adequate targets of measurement and evaluation in compliance programs.

^{59. &}quot;Never confuse motion with action." Attributed to Benjamin Franklin as quoted in Errick A. Ford, Iron Sharpens Iron: Wisdom of the Ages 34 (2010).

This confusion between measuring efforts versus measuring results can impair compliance testing in many settings. For example, the completion of compliance training sessions (or the presence of large numbers of employees in compliance training sessions) is a measure of compliance efforts—it measures only steps contributing to law compliance in corporate organizations. This is not the same as ascertaining whether training has produced useful results, for instance by instilled knowledge in the minds of employees about what they must do in their respective jobs to accomplish corporate law compliance. The latter would be a compliance-related metric that has a direct linkage to the ultimate goal underlying all organizational compliance programs—the prevention of illegal conduct. All metrics for measuring the success of a compliance program—both the program as a whole and components of the program—should be justified in terms of how they relate to corporate law compliance.

c. Sources of Testing Metrics

Testing metrics—that is, indicators of high quality compliance performance against which actual performance is evaluated—can be drawn from several sources. Careful selection of these metrics is highly important. Testing programs incorporating poor metrics may be costly to conduct yet produce useless results. This entails waste in testing transactions. Testing programs with poor metrics may also falsely indicate that compliance programs are working well, leading to unnecessary compliance failures and associated costs in corporate penalties. This entails waste in amounts spent on resolving preventable compliance problems. The use of poor compliance metrics in compliance testing can be worse than conducting no testing at all since a company can both waste its compliance evaluation resources on meaningless testing and incur further costs due to undetected compliance program flaws.

A metric for a compliance program feature should be both closely related to positive compliance results and practically measurable. There should be a clear, regularly operative reason why changes in the metric will correlate with increases in law compliance levels.⁶⁰ Metrics that change without associ-

^{60.} See Ries, supra note 4, at 143.

ated shifts in law compliance are not worth measuring. Metrics that are associated with compliance levels, but that are very difficult to measure, may also be undesirable because the necessary measurements may be skipped or poorly performed in times of resource crunches leading to gaps in program evaluations. Even where a metric is easily measured, the metric may still be undesirable if measurements of the metric cannot be evaluated fully and promptly. If meaningful evaluations are not generated or require significant delays, then the measurement of a metric may not translate into timely compliance program feedback and the value of related evaluations in guiding compliance efforts or improvements will be lost.

Compliance metrics with clear correlations to compliance results increase the perceived legitimacy of resulting evaluations. Selecting metrics with clear relationships to compliance results will generate respect for the metrics as performance targets. Performance directions to employees can be framed in terms of maximizing compliance-related metrics, which is often a more comprehensible target than the more amorphous and confusing goal of complying with sometimes complex and confusing legal standards. By directing employee performance towards maximizing compliance metrics closely associated with desirable compliance results, companies can help to focus and legitimize directions to employees about how to shape their conduct to promote corporate law compliance.

As employee performance is evaluated at intervals, the use of metrics with confirmed links to compliance results will increase the legitimacy of evaluation results and related differences in employee treatment. Rewards to employees for superior performance as measured by compliance-related metrics will have legitimacy because such performance will be likely to produce enhanced law compliance and increased corporate revenues due to reduced penalties. Positive employee rewards related to these increased revenues will have the same legitimacy as rewards for other revenue-enhancing conduct such as closing numerous product sales. Employee discipline for poor performance in relation to these compliance metrics will also have a clear logic and legitimacy. Such performance will suggest a heightened likelihood of illegal corporate conduct and increased corporate costs due to penalties. Discipline for such cost-incurring conduct will be an understandable counterpart to discipline for any other conduct putting significant physical assets of a corporation at risk. Conversely, compliance metrics that appear to employees to be disassociated from actual compliance results will be seen as arbitrary performance goals and potentially ignored (or just treated with cynicism).⁶¹ Discipline or rewards imposed in relation to such seemingly arbitrary criteria will be viewed with contempt by the disfavored employees.

Compliance metrics with clear links to compliance results can be found in at least two sources: (1) metrics measuring whether company employees have completed actions needed to achieve law compliance (or clearly tending to make compliance more likely), and (2) metrics testing whether a company has implemented actions specified in government standards for minimally sufficient law compliance programs. The first type of metric (hereinafter "conduct standards") focuses on the actual adherence of corporate activities to legal requirements. The second type of metric (hereinafter "systems standards") assesses whether a corporation has implemented the types of systems surrounding corporate operations that promote and monitor legally dictated actions.

Often, evaluation of performance against these two types of metrics will have substantial overlap. For example, parties assessing whether employees in a particular corporate function have adhered to legal standards in recent activities (thereby applying conduct standards) may also evaluate how well this past performance has been monitored (thereby applying systems standards).

d. Errors in Choosing Metrics

Two common errors should be avoided in selecting compliance performance metrics. First, a metric should not be chosen just because it is easily measured or evaluated—it is essential that the metric also has a confirmed relationship to an important feature of compliance. Since fact-finding and evaluations regarding compliance features are potentially costly, companies may try to minimize costs by selecting easily assessed metrics. While understandable, this is misguided. The results may be inexpensive, but useless. Reducing costs in completing useful compliance evaluations will be helpful, but the

^{61.} See id. at 146-48.

usefulness of compliance performance evaluations in learning about program effectiveness and in shaping future compliance efforts must always be the primary, overriding criteria for picking and applying compliance metrics.

Second, a company should be wary of selecting "vanity metrics" for assessing compliance program features—that is, selecting metrics that company leaders know will produce favorable evaluation results and make their company look good in formal compliance program documentation even if the company's actual compliance record is not necessarily good.⁶² These sorts of convenient and self-serving compliance measures are chosen by some companies to produce testing results that serve as window dressing for their compliance systems—producing glowing compliance program evaluations that can be brought out and shown to law enforcement officials or others as evidence of good compliance methods when these are in dispute. The difficulty with this superficial approach is that real compliance problems may be overlooked and allowed to fester. Good results as measured by incomplete vanity measures may be biased towards only the strong features of programs. At best, the results of such evaluations will be incomplete and tend to conceal the weak or dysfunctional aspects of programs. Proper metrics should assess all of the system features needed for compliance and all indicators of potential gaps in compliance. Only by detection and evaluation of the latter can a balanced picture of compliance success (or lack of it) be created and developing compliance problems be identified and addressed as promptly as possible.

5. Lean Compliance Step 3: Learn

a. Features of Validated Compliance Learning

Learning steps in compliance programs should transform testing results into new plans for action. Learning in lean law compliance cycles occurs as the results of testing are added to prior knowledge to provide guidance for future operating practices.⁶³ Compliance learning (validated by data) involves

^{62.} See id. at 128.

^{63.} Learning in a lean compliance cycle will be accomplished via two related tasks: (1) rigorously measuring compliance levels and related business conditions prior to implementing a new compliance practice, and (2) measuring the same compliance features and conditions after the practice is im-

interpreting test results and projecting fixes to compliance practices where needed. Fixes will involve new practices that should be subject to further testing to confirm their effectiveness. Validated learning—that is, learning emerging from empirically confirming or "validating" the efficacy of compliance practices via test results—can identify the weaknesses or failures of past compliance approaches as well as the workability or superiority of newly implemented changes.

b. Learning Targets

Learning in compliance systems should be as broad as compliance testing—that is, learning should address each material component of compliance practices. Analyses of compliance practices, their operation, and their results can produce new learned information about the best means of using compliance practices to achieve successful compliance results, the costs of carrying out compliance practices, and the areas where existing practices are ineffective. If multiple methods are tested in parallel, new information gathering and compliance practice learning can proceed in parallel for all these practice features.

Learning potential and speed are important considerations in determining the merit of alternative compliance metrics and testing processes. In all testing settings, monitoring and evaluation steps should be shaped and results reported with an eye towards answering as quickly as possible the one fundamental question underlying the operation of all compliance programs: "What types of compliance practices do we predict are most likely to prevent offenses in our company's future business activities?"

plemented to evaluate whether the company's compliance results have changed favorably in the manner planned for the new practice. Many practices will fail to achieve meaningful changes or results over past practices or will achieve small changes only at great costs such that the practices are not worth maintaining. These are the sorts of lessons that compliance learning targets. The design of measurement and analysis processes within lean compliance systems should be formulated with these learning goals in mind. See id. at 114 (describing similar measurement and analysis goals for learning processes embedded in lean startup company management systems).

c. Structuring Incremental Learning

Unless changes must be implemented broadly in a very short time, old and new compliance practices can be used concurrently in similar corporate activities to determine which practice is superior. At the end of the concurrent use, the version proven superior can be spread throughout all of the settings where the practice will have value within the company involved. Using small-scale testing and validated learning in this way, a company's established (and previously validated) practices will always have an empirically proven basis until better practices—confirmed as better via incremental learning in small settings and with small risks to the company involved—are found and validated as superior.

d. Adjusting Learning Intensity to Risk Significance

The amount of compliance learning needed by a company in a particular compliance area—and, hence, the features of appropriate compliance practice testing and analysis—depends on such factors as: (1) the magnitude and feaof uncertainty surrounding applicable legalrequirements, (2) the frequency of business activities subject to various compliance practices, and (3) the aggregate adverse consequences to the firm involved if the firm performs particular compliance activities poorly, commits illegal activities, and suffers the corresponding adverse consequences. The largest needs for learning will relate to illegal conduct leading to large penalties and potentially arising out of conduct that a firm is likely to undertake frequently. Large learning needs will also be associated with settings where there is high uncertainty about how to ensure that employees will adhere to applicable laws (perhaps because the settings involve new business territory for the company or new laws).

Business activities in these sorts of settings where uncertainty is high and a company has a lot at stake in attaining compliance might be surrounded by compliance practices that ensure a great deal of rapid compliance learning and compliance practice adjustment. In particular, business practices in these high-uncertainty contexts might be undertaken with numerous sources of law compliance guidance to employees and checks to determine that initial law compliance measures are sufficient to ensure compliance. Once means for achieving

compliance regularly are learned and confirmed via testing, the resulting practices can be treated as the norm with only occasional reassessments to see if something (in either the law, business surroundings, or corporate personnel) has changed to make the previously effective compliance measures no longer sufficient. An accumulated record of compliance success builds up information and confidence that adequate compliance practices are in place. By reducing the uncertainty about how to comply with the law, these trials and results lower the need for additional learning. However, the need for learning is never completely removed—changing circumstances, as are always present in evolving business environments, may inject new legal uncertainties and new needs for learning about how to respond with new compliance measures.

- 6. Lean Compliance Step 4: Revise
- a. Revisions Are Both the End and the Beginning of Lean Compliance Cycles

Revisions of compliance practices in lean compliance processes are both the end of one lean compliance cycle and the beginning of another. Revisions occur because testing of past practices indicates that revisions are needed to achieve compliance or to reduce associated costs or other negative corporate impacts.⁶⁴ The revisions are outputs of the testing and learning steps of the past compliance cycle. However, the compliance practices implemented in the new revisions, as unproven compliance actions, have uncertain functionality and should be the objects of testing and learning in the future. Their effectiveness over time should be scrutinized and confirmed via additional information gathering, evaluation, and assessment. If the new practices appear to have resolved the previously identified compliance performance deficiencies, then no further action may be needed. If not, then further revisions may be needed to produce better performance. In

^{64.} Significant changes in compliance approaches and strategies (or at least the testing of new approaches and strategies) are warranted under lean compliance principles where compliance program measurements indicate that a compliance program element is either not achieving its intended results or is achieving those results with unacceptable costs. *See id.* at 149–50 (describing similar bases for shifting or "pivoting" business practices in startup companies).

this way, revisions both conclude prior processes for improving compliance practices and set the stage for further testing and possible additional improvements.

b. Deciding Whether to Persevere or Pivot

At the end of each compliance cycle leading to validated findings about the effectiveness of existing compliance practices, a company can choose to "persevere or pivot" regarding its compliance practices. This should be an informed choice based on the relative merit of change or continuation, not one made out of complacency or lethargy because old practices are familiar and easier to continue than to change. A company should reject old compliance practices and change directions to "pivot" to a new approach if there is no positive confirmation in compliance findings that existing practices are successful.⁶⁵ A pivot is warranted in at least four types of situations: (1) where there is an absence of positive findings confirming the success of past practices in achieving their intended results (practices with unmeasurable results are presumed failures, at least after a substantial period of use),66 (2) where compliance measurements suggest that past practices are producing negative effects, (3) where compliance measurements suggest that past practices are producing positive effects, but at costs that are too great in relation to the benefits realized through the practices (such practices are simply unreasonably costly and produce net organizational waste), and (4) where compliance measurements indicate that new compliance practices are more effective than old practices (achieving better compliance results at a similar implementation costs).

The new approach adopted in a pivot may be one that has been previously tested through earlier adoption on a limited scale or may be a completely new practice that is projected to be worth a try. A previously untried compliance practice should be adopted tentatively, if possible, as the practice may have unanticipated negative interactions with other business

^{65.} See id.

^{66.} Such practices raise substantial risks of waste (because the costs of completing the practices are not offset by any apparent benefits) and may raise even more serious problems of complacency (because the practices, although ineffective, falsely reassure company managers that adequate steps to ensure compliance are in place).

features or unappreciated costs. To minimize these sorts of negative impacts, initial use of a completely new process should be pursued only on a small scale if possible. A new practice can be used sparingly pending testing by either limiting the business units where the practice is applied or the volume of business transactions for which the new practice is used.

Where a new variation is adopted on a small scale and shown to produce good results in these limited usages, a company can pivot to widespread use of the new practice with some confidence that the expanded use will produce positive results on a wider scale that are similar to those found in the limited testing. Even initially promising results should be viewed with caution as they may not reflect the ultimate results when a practice is used broadly. Hence, even where a new practice has tested well under limited usage, it should be tested further when rolled out into widespread use. Broader usage may cause the practice to be applied in circumstances where it is not appropriate. In addition, the wider use of the practice may create new resource scarcity problems or raise other issues not found in limited-use testing. The potential for unanticipated new problems due to large-scale usage effects justifies additional testing of procedures in full scale use before they can be considered validated in typical operation.

If test results indicate that a practice is working and the company knows of no alternative practice that appears more effective or efficient, then the appropriate course is to "persevere"—that is, to retain the practice in future activities (while still submitting the practice to renewed testing and learning in subsequent compliance cycles to confirm that the practice is still working as conditions and legal requirements change).

VI.

INCORPORATING LEAN LAW COMPLIANCE IN LEGAL STANDARDS

Beyond simply being attractive to corporate managers as an effective tool for advancing corporate law compliance, lean compliance will be a valuable addition to legal standards governing compliance programs. Adding lean compliance management criteria to such standards will help to ensure that compliance programs are conducted with validated learning and with associated confirmations of compliance success. Compliance programs operated without this type of validation may reflect little more than mistargeted or poorly executed attempts at law compliance. The public deserves better and government standards should demand more. Requirements of lean compliance measures will ensure that companies seeking to operate compliance programs (and to gain the legal benefits associated with these programs) will have incentives to constantly check and confirm the effectiveness of their programs and to make improvements until they have brought their programs to confirmed effectiveness. This Part describes several means whereby lean compliance criteria might be injected into existing legal standards.

A. Requiring Lean Compliance in Compliance Program Standards

One simple means to incorporate lean compliance principles into legal standards is to require such compliance methods in legal standards for minimally adequate law compliance programs. Compliance program standards requiring specific types of compliance program elements are now included in a wide variety of legal standards.⁶⁷ Compliance program features are addressed in organizational liability standards in fields as diverse as environmental law,⁶⁸ money laundering law,⁶⁹ corporate law,⁷⁰ health care law,⁷¹ securities law,⁷² and criminal

^{67.} Programs with the mandated features are recognized as generally effective compliance programs that warrant favorable corporate treatment (with the particular type of treatment dictated by the legal context). Legal standards defining minimally adequate compliance program features also provide guidance for the construction of new compliance programs as organizations establish or expand programs either voluntarily or under the compulsion of criminal sentences or regulatory sanctions. See Diane E. Murphy, The Federal Sentencing Guidelines for Organizations: A Decade of Promoting Compliance and Ethics, 87 Iowa L. Rev. 697, 703–04 (2002) (noting that compliance program standards in the federal organizational sentencing guidelines provide criteria for recognizing generally effective corporate programs and for guiding companies that are required to adopt or improve such programs).

^{68.} Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention, 65 Fed. Reg. 19618, 19625 (Apr. 11, 2000) (standards for environmental law compliance programs).

^{69.} Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot Act) Act of 2001, Pub. L. 107-56, § 352(a) (requiring anti-money laundering compliance programs in financial institutions).

^{70.} Stone *ex. rel*, AmSouth Bancorporation v. Ritter, 911 A.2d 362, 368–70 (Del. 2006) (standards for liability of corporate directors and officers

law.⁷³ Government contractors are also required to operate law compliance programs meeting standards in federal purchasing regulations.⁷⁴ Compliance program features are also considered by prosecutors and other government officials in evaluating corporate charging decisions, case settlement terms, and penalty levels.⁷⁵

Legal standards addressing compliance program features typically include two types of requirements. First, these standards impose general duty requirements, requiring that minimum programs reflect due care by companies to match their business activities with reasonable measures to prevent associated misconduct.⁷⁶ These requirements mandate reasonable (but not perfectly successful) efforts to prevent illegal actions.⁷⁷ The reasonableness of compliance program practices depends on factors such as the seriousness of the illegal conduct at stake (measured primarily from the harm likely to be caused or threatened) and the costs of preventing that conduct.⁷⁸ Second, compliance program standards require firms to adopt specific compliance practices in order to be deemed to have minimally adequate compliance programs.⁷⁹ These provisions requiring specific practices provide broad structural guidance for the construction and operation of compliance programs.

based on inattention to corporate compliance programs); In re Caremark International Inc. Derivative Litigation, 698 A.2d 959, 970 (Del. Ch. 1996) (same).

^{71.} Compliance Program Guidance for Hospitals, 63 Fed. Reg. 8987 (Feb. 23, 1998) (standards for compliance programs in hospitals).

^{72.} Securities Exchange Act of 1934 Release No. 44969, Sec. & Exch. Comm'n (Oct. 23, 2001), http://www.sec.gov/litigation/investreport/3444969.htm.

^{73.} Principles of Federal Prosecution of Business Organizations, U.S. Dep't of Justice (Jan. 20, 2003), http://www.justice.gov/opa/documents/corp-charging-guidelines.pdf (corporate prosecution standards); *supra* note 33, at c. 8 (corporate sentencing standards).

^{74. 48} C.F.R. \S 203.7000 (2002) (compliance program requirements for federal contractors).

^{75.} See generally supra note 23, §§ 8.04, 14.01-14.03.

^{76.} See supra note 33, § 8B2.1(a).

^{77.} See supra note 54, at 51–91 (describing the features of reasonable compliance efforts by organizational actors).

^{78.} See id.

^{79.} See supra note 33, § 8B2.1(b).

Illustrative examples of both these types of minimum criteria for compliance programs are present in the United States Sentencing Commission's Organizational Sentencing Guidelines (Sentencing Guidelines)—an influential source of compliance program criteria in the criminal law field and the basis for additional regulatory standards in many other legal fields as well. The Sentencing Guidelines address the general misconduct prevention duties of companies in noting that "[t]he hallmark of an effective program to prevent and detect violations of law is that the organization exercised due diligence in seeking to prevent and detect illegal conduct by its employees and other agents."80 In addition, the Sentencing Guidelines require several specific types of compliance program elements, including company practices: (1) providing law compliance guidance to company employees and requiring adherence to compliance standards, (2) monitoring law compliance results, (3) periodically evaluating the sufficiency of a company's compliance program features, and (4) responding to compliance problems by making changes to the relevant organization's compliance program.81

Lean compliance requirements should be added to these sorts of compliance program standards. In assessing whether corporations have undertaken due diligence to prevent offenses, as well as in evaluating whether particular corporate practices meet the more specific compliance program element requirements dictated by legal standards, government officials should consider whether companies have used lean compliance methods to shape and operate their compliance programs. This subpart describes how these enhanced requirements might be implemented.

1. Requiring Lean Compliance Management in Assessing Due Diligence

Lean compliance management should be treated as a necessary component of due diligence to prevent offenses and, therefore, a necessary feature of minimally adequate law compliance programs. With such methods, a company can establish, through verified learning, that it has exercised reasonable care in preventing the types of illegal conduct generally threat-

^{80.} Id. at § 8A1.2, cmt. n.3(k).

^{81.} *Id.* at §§ 8B2.1(b)(5)(A), (5)(B), (7).

ening its business activities. Absent the sort of verified learning embedded in lean compliance methods, a company will have no more than a hope that its practices are sufficient to meet its typical law compliance challenges. Such a mere unconfirmed hope is not due diligence. Important matters such as law compliance require confirmation; the absence of confirmation is an absence of due care. Hence, a company that has not pursued lean compliance (or some equivalent method by which it can confirm the successful operation of its compliance systems) should not be deemed to have exercised due diligence to prevent illegal conduct and should not be granted the favorable legal treatment afforded companies with generally effective law compliance programs.

2. Requiring Lean Compliance in Provisions Addressing Specific Program Features

Lean compliance practices should also be considered essential in meeting the specific feature requirements of compliance program standards. In particular, the portions of government standards that require compliance program steps to accomplish compliance direction, monitoring, program evaluation, and program revision steps should be treated as requiring the same types of validated learning practices as are dictated by build, test, learn, and revise steps of lean compliance management cycles.

One way to view this type of enhanced compliance program standard mandating element-by-element testing and improvement of compliance program elements is that lean compliance management provides a unifying rationale for the specific compliance program elements required by government standards. Lean compliance principles provide a reminder that compliance program components are interrelated and should, as a system, promote law compliance despite the uncertainties surrounding how to achieve such compliance. Lean compliance recognizes that learning how to perform compliance effectively provides a common, unifying theme connecting the detailed features of compliance programs to each other and defining the intended contributions of these inner features to corporate compliance despite legal uncertainty.

Lean compliance recognizes that components of compliance programs are parts of systems for learning how to comply

with applicable laws in business activities. Lessons about how to comply with legal requirements must be learned and relearned as businesses and legal circumstances change. Hence, compliance program practices are always tentative, always adopted "on approval," and subject to revision. The process of implementation and revision is guided by validated learning through ongoing measurement and evaluation. The monitoring, program evaluation, and program revision steps compelled by government standards are means for perfecting or (in lean compliance terminology) validating the efficacy of the practices in use.

Given the many business circumstances and compliance demands that companies face and must respond to, it is little wonder that their predictions about the success of implemented compliance practices are often a bit off target. Doubt about the success of unproven compliance practices is warranted amidst the complexity and constant change of business environments and legal standards. Companies that implement compliance practices without provisions for active element-byelement testing of their compliance practices are in denial about the difficulty and potentially changing character of their compliance challenges. They are blindly accepting initial predictions of success of their programs as the sole basis for confidence in the effectiveness of their compliance practices. To have reasonable confidence in the success of the practices that is, to act reasonably and with due care in administering their compliance programs—corporate managers must put compliance practices to careful tests and evaluations once the practices are in place.82

Lean compliance principles describe how these elementby-element tests and evaluations in the face of uncertain compliance demands should proceed. These principles dictate that validated testing of important compliance program ele-

^{82.} No company would trust its manufacturing facilities to produce perfect products without testing for product defects. Typically, this is accomplished by analyzing a sample of manufacturing results. The evaluation of compliance program results serves the same function. Just as a manufacturer cannot reasonably claim to produce high quality products without conducting product defect inspections and implementing quality controls, so too can a corporate organization not reasonably assert that it is operating an effective compliance program unless it actively tests and evaluates the compliance results achieved by its program.

ments should be the norm, such that each practice (whether new or old) is a target of learning about its effectiveness. This learning should be required for each type of compliance program element addressed in statutes, regulations, and other governmental standards.

The required subjects of testing and validated learning should not just be whether compliance programs are being operated in accordance with their design specifications (although this might be a useful initial measure of progress towards the ultimate goal of realizing law compliance in corporate affairs). Rather, legally sufficient compliance programs should include element-by-element evaluations and testing of compliance results achieved and mistakes made. Information about compliance mistakes may be even more helpful as learning tools than information about successes.

Compliance practices implemented in good faith, but without testing for positive compliance results just reflect hopes for the future: they are hoped and predicted to work, but not validated in the way that most important business practices are tested to confirm efficacy and avoid waste. Legally recognized compliance programs should reflect more than management's hopes for success. They should reflect validated learning about the likely success of compliance programs so that company officials expressing confidence in the adequacy of their programs can point to the same sorts of evidence of likely success as the managers' demand for other important types of corporate performance like financial integrity and product quality.

Ultimately, legal standards mandating specific compliance program practices should recognize that it is irresponsible and legally insufficient for leaders of corporate entities to blindly assume that substantial business activities are being conducted legally without validating that this is the case. This is as irresponsible as implementing employee practices that are purported to ensure employee safety without seeing if safe work activities follow. Safety is important enough to measure the results achieved before being satisfied with the sufficiency of the environment created; so is corporate law compliance. Legal tests for compliance program sufficiency should embrace this same notion and demand that companies adopt lean compliance program techniques for validated learning about the suc-

cess of their compliance practices as minimum features of legally recognized compliance programs.

B. Considering Lean Compliance in Factual Determinations

Formal amendments to standards may not be needed to include lean compliance considerations in government decision making. Lean compliance (and its absence) can be considered by government officials in making factual findings under existing compliance program standards. In making these factual findings, officials must interpret how existing compliance program criteria should be applied to particular corporate settings. In certain corporations pursuing business activities with major public risks (due to factors such as inherently dangerous activities or the need for high integrity in fiduciary activities to generate and maintain public trust), government officials may see lean compliance methods as necessary parts of minimally adequate compliance efforts in publicly sensitive business contexts.

For example, government officials making a factual determination as to whether a company has operated a generally effective compliance program (or determining whether a proposed program is likely to be regularly effective in the context of compelling a firm to adopt such a program where one was previously lacking)⁸³ can apply lean compliance standards in determining if a particular program is likely to be regularly effective. Definitions of effective compliance programs can be interpreted to require lean compliance methods as part of reasonable compliance efforts.⁸⁴ In effect, the compliance results that are considered evidence of an effective program may be

^{83.} See, e.g., supra note 33, § 8A1.2 (describing compliance program criteria requiring that minimally adequate compliance programs be generally effective in ensuring law compliance).

^{84.} Interpreting existing compliance program standards requiring generally effective compliance programs as implicitly requiring validated learning about compliance practices through lean compliance methods will be consistent with the crime prevention goals of present legal standards. This interpretation will ensure that compliance program standards incorporate developing knowledge about how to best implement lean management methods. Future legal evaluations of compliance programs by government officials should include findings regarding the presence or absence of lean compliance practices to emphasize both the officials' attention to such practices and the importance of incorporating these practices in corporate compliance management.

adjusted to call for better results and more thorough compliance efforts in settings where the public importance of compliance is particularly great. At least in these settings (and perhaps more generally), public officials making factual findings should accept a compliance program as regularly effective and worthy of positive legal effects only if the program incorporates lean management cycles and associated validated learning about the effectiveness of the compliance practices comprising the program. ⁸⁵ Absent such steps, a company operating a compliance program is often operating in the dark. It has little or no way to know if it is effectively preventing misconduct. Such willful ignorance as to effectiveness of compliance efforts is inherently unreasonable and insufficient in corporate business settings where the public is at high risk.

VII.

LEAN COMPLIANCE AS A VALUABLE CORPORATE MANAGEMENT TOOL

Aside from their potential importance in formal legal standards and governmental decision making, lean compliance methods deserve increased attention from corporate managers as valuable compliance management tools. Lean compliance methods deserve consideration as means to produce better compliance results and to achieve associated reductions in legal penalties and other adverse corporate impacts from illegal misconduct. The rewards to company managers from adoption of lean compliance will lie in the traditional features of corporate success—decreased costs and increased profits. This Part summarizes the practical management steps that company leaders can take—with the assistance of corporate counsel and compliance program experts—to use lean compliance methods to improve corporate management and performance by improving law compliance results.

A. Viewing Lean Law Compliance as a Loss Prevention Tool

Lean compliance methods offer valuable practical benefits to corporate managers in reduced liability and related loss

^{85.} This interpretation will ensure that compliance program standards incorporate developing knowledge about how to best implement lean management methods.

prevention. Corporate managers should consider adopting lean compliance practices for the same reasons they pursue other loss prevention tools. Just as productive factory practices are accompanied by related safety measures to prevent injuries to workers, so should large-scale business practices be accompanied with legal "safety practices" to prevent illegal actions in the course of the business activities. Of course, compliance measures that do not meaningfully enhance compliance and reduce legal costs are just wasteful efforts. Validated learning about the effectiveness of various law compliance measures can determine if these measures are serving their intended compliance-enhancing purposes and providing corporate compliance gains for monies spent.

Learning and feedback about the success of expensive corporate activities is a basic feature of responsible corporate spending and action. No sensible company would commit large resources to a major corporate activity, such as a major sales campaign, without evaluating the campaign's effectiveness. The opportunities for wasteful expenditures—and continuing wasteful expenditures—are too great. By the same logic, companies should be hesitant to commit large sums to large-scale compliance practices without testing that they are obtaining positive compliance results from their expenditures. Validated learning about the effectiveness of expensive compliance practices can determine if significant compliance expenditures represent monies well spent or outright waste. The case in favor of lean compliance as a management tool is as strong as the frequently compelling case for systematic loss prevention tools in companies generally.

Without regular testing of results achieved, compliance programs run the risk of becoming highly efficient machines for accomplishing nothing—that is, of running well within their design specifications, but having no substantial impacts on the real goal of achieving organizational law compliance. As management expert Peter Drucker once observed: "There is surely nothing quite so useless as doing with great efficiency what should not be done at all." Efficiently conducted, but practically inconsequential compliance practices are good examples of Drucker's wasteful practices that should not be done at all. Such ineffective practices waste compliance resources

^{86.} Peter F. Drucker, On the Profession of Management 67 (1965).

that could better be used on effective compliance measures. They also risk misleading company managers into thinking that that their companies are realizing meaningful compliance results.

B. Lean Compliance Is an Effective Way to Respond to Legal Uncertainty and to Avoid Changing Sources of Waste

Lean compliance management is a particularly appropriate management tool for identifying effective compliance measures amidst high legal uncertainty. Such uncertainty may stem from complex requirements, ambiguous legal standards, intricate business dealings, changing business activities, or some combination of these. For companies that must respond to complex and changing legal demands—and that includes most firms in present business environments—the steps needed to comply with applicable laws are often highly uncertain and likely to remain so for some time. And corresponding sources of corporate waste are likely to be equally shifting and unpredictable as companies either waste resources on penalties for preventable misconduct or waste resources on misplaced law compliance efforts that do not address the companies' real law compliance risks.

Amidst this high uncertainty, companies can benefit from the same sorts of lean management techniques that businesses have successfully used to manage key aspects of corporate performance amidst highly uncertain surroundings and pressures. Many of these techniques have been explored and perfected in the high-uncertainty environment of startup company management. Lean management has proven to be useful in crafting diverse practices in startup companies, including practices for new product development, production, and marketing. Lean management is management designed for and matched to uncertainty. It helps company leaders overcome unavoidable uncertainty about how to achieve performance success by providing a structured environment for learning about how best to proceed and how to perfect effective practices with verified results.

Companies seeking to avoid illegal conduct and associated liability costs will have no choice, but to confront the legal uncertainties facing them as they try to increase their levels of compliance with legal requirements. In moving forward de-

spite this uncertainty and groping for new practices that can achieve compliance, companies can use lean compliance methods as valuable learning and practice development tools. These tools are designed to remove uncertainty and to provide evidence of the probable merit of practices that are backed with large rollout expenditures. In the context of legal uncertainties and corresponding opportunities for wasteful compliance efforts, lean compliance practices offer means to learn how to produce compliance results despite substantial initial uncertainty about how to proceed. Lean compliance management provides structured means for learning how to comply with laws in uncertain environments and for tailoring of compliance practices to the needs and circumstances of individual companies. With such learning, companies will gain direction in both reducing their waste on meaningless compliance activities and improving their compliance results.

C. Superiority of Lean Compliance over Command and Control Alternatives

Lean compliance methods offer significant management advantages over the primary management approach used to pursue compliance in many companies—that is, the use of "command and control" compliance practices. In a compliance system based on command and control principles, the actions needed from each employee for corporate law compliance are carefully dictated and controlled. The flaw in this approach is that the actions needed for corporate law compliance are often too uncertain for advanced planning and control as is required in command and control methods. The uncertainty of legal requirements often makes it impossible to predict and control the proper compliance-promoting actions.⁸⁷

^{87.} Earlier "command and control" methods of management were premised on relatively stable and well-understood performance environments where the nature of desired performance in the future was predictable based on the repetition of past, well-understood processes. However, as uncertainties about relevant performance demands and success criteria have grown, the ability to predict successful performance has lessened. The result is that command and control techniques may firmly direct employees, but in the wrong directions. That is, the predictions of how employees should perform may be wrong, meaning that the performance dictated may not attain anything of value to the company involved. In a compliance setting, past or

Command and control methods can be effective if the detailed steps needed for some aspect of corporate performance are definitively known; however, such methods can lead to major errors and waste where the features of actions needed for law compliance are poorly understood. Management methods must be matched to uncertainty levels. Command and control methods are well suited to well-understood and frequently encountered situations, but poorly matched to situations where proper actions are uncertain. To see this contrast, consider the different performance management methods that are best suited to promoting defect-free production on an automobile assembly line versus the practices that can best produce corporate law compliance amidst considerable legal uncertainty.

On the assembly line, it is desirable to identify a sequence of actions producing defect-free products and then to undertake car production in the same sequence over and over to minimize defects. Once the best way to take action is ascertained, the primary management objective is to keep doing things this optimal way. Past corporate experience informs future corporate prediction of the proper course of action and accompanying management practices. Past experience dictates future action because that experience provides a sound basis for predictions of future results.⁸⁸

partial understanding of legally required conduct may lead to directions and controls that cause employees to pursue conduct incorrectly predicted as promoting corporate law compliance. Amidst uncertain performance demands, companies must learn (rather than predict) how to best achieve compliance results. Lean compliance methods incorporating validated learning about the success achieved from tentatively adopted practices provide the means for implementing these methods and responding to legal uncertainties. Ries, *supra* note 4, at 276–78.

88. There are, admittedly, a few legal areas where a similar pursuit of carefully repeated conduct will be desirable in attaining law compliance and where management methods aimed at ensuring the repeated conduct will be appropriate. For example, where laws require the filing of certain paperwork following a particular type of transaction or require that a permit be obtained before undertaking a type of action, relative regimented instructions and monitoring systems within a company may be appropriate means to ensure that the needed conduct occurs every time it is required. The simple linkage between action and legally compelled response in this situation reduces legal uncertainty about what to do. Consequently, the sorts of learning processes underlying lean management are not needed. However, these sorts of clear cut situations seem likely to be rarities in complex and changing corporate environments and do not, in their rare appearance, undercut

In contrast, if a company dictates a single method of handling toxic materials to adhere to environmental laws and the nature of either the laws or the materials changes, the initially dictated actions may easily fail to ensure future law compliance. The uncertainties surrounding legally appropriate handling of the company's currently held toxic materials undercut the ability to confidently predict the nature of the actions needed for law compliance, which in turn eliminates much of the value of basing future performance on command and control methods. Change demands new approaches and learning processes to find those approaches.

D. Techniques for Implementing Lean Compliance Management across Diverse Compliance Settings and Practices

To implement lean compliance methods in compliance program designs, at least four overarching design principles should be followed:

- (1) No practice should be implemented without a plan for associated measurements of the results of the practice and evaluations of the effectiveness of the practice in promoting law compliance (preferably in comparison with the effectiveness of alternative steps for promoting the same aspect of law compliance);
- (2) The frequency of testing and evaluation (as well as the amount of resources devoted to it) should increase with the seriousness of the offenses and corporate harm that various compliance practices are aimed at preventing. This is the case because the likely corporate costs of ineffective compliance practices will increase with the size of penalties or other adverse consequences associated with various types of illegal conduct. It will be cost effective to invest more resources in practice testing where larger potential costs are at stake;
- (3) The frequency of testing and evaluation (as well as the amount of resources devoted to it) should decrease with the amount of successful, validated experience that a company has with a practice (because

the need for lean compliance management to address most corporate legal needs and requirements.

- past success, confirmed through testing, provides some evidence of the likely continued success of the practice); and
- (4) Practices that have not been tested recently should be discontinued or tested again immediately to avoid possible long-term acceptance of practices with no effects (which may both waste corporate resources and create a misplaced sense of compliance impact and success).

Applying these principles can help company leaders to implement lean compliance methods across diverse compliance program elements and to ensure that validated learning is part of day-to-day compliance program development and operation.

Validation of the success of compliance program elements through lean compliance practices can support many useful steps in overall program management. Identifying compliance mistakes can help companies to cut off liability-inducing conduct as quickly as possible (thereby capping the liability costs to the company involved) and to gain guidance about how to improve practices for the future (by insuring that actions leading to past misconduct are impossible or at least strongly discouraged and that parties undertaking similar misconduct in the future will be promptly detected and exposed). Furthermore, prompt identification of compliance gaps can help a company to self-report its illegal conduct to public authorities in a timely manner—ideally as the first party to reveal the misconduct to authorities. Such self-reporting may qualify the company for favorable treatment by authorities, thereby reducing or completely avoiding corporate penalties.

E. Documentation Benefits of Lean Compliance: Establishing a Record of Compliance Due Diligence

By implementing lean compliance across diverse compliance settings, companies can not only tailor their compliance practices to their particular law compliance challenges, they can build up complete records of compliance due diligence via lean compliance steps that create related documentation. The testing and evaluation of practices will self-document the impacts of the practices and the reasons they were kept or rejected. These impacts and evaluation criteria will provide evidence regarding the desire of company officials to achieve

compliance and their good faith efforts to promote this end. The records flowing from lean compliance practices will document the substantial efforts of company officials to implement and improve practices that will attain high levels of compliance. The scope of resources devoted to compliance will also be apparent from the documentation of steps taken to accomplish practice testing, evaluation, and revisions.

Overall, a company's willingness to subject its practices to the critical evaluations inherent in lean law compliance methods will provide strong evidence of the company's commitment to law compliance. The records documenting the testing and revisions of practices will also confirm the company's adherence to legal standards specifically requiring testing, monitoring, and revision practices in minimally adequate corporate law compliance programs. By documenting both a company's overall good faith in compliance efforts and its completion of specific compliance tasks, lean compliance systems can create helpful compliance documentation that produces corporate benefits beyond the compliance results achieved.

CONCLUSION: FUTURE DEVELOPMENT OF LEAN COMPLIANCE AS A LEGAL TOOL

A. Applying Lean Compliance Standards in Broader Substantive Contexts

Lean compliance methods and related validated learning about the impacts of compliance practices have potential roles in shaping substantive legal standards across many legal domains. Lean compliance requirements will be valuable additions to future legal standards wherever reasonable law compliance efforts by organizations have legal significance. Where reasonable compliance efforts provide grounds for reduced corporate liability—such as in determining if a company should be liable for sexual harassment by employees despite efforts to prevent such harassment—lean compliance criteria can be used as measures of sufficient compliance efforts. Diligent pursuit of lean compliance methods will demonstrate reasonable corporate behavior under this approach.

This approach equates reasonable effort at an organizational level with matching organizational legal risks to corresponding risk responses. Reasonable effort by a corporation or other organization will depend on whether the entity has made a reasonable response to its law compliance risks (as identified in its risk assessments) and implemented corresponding methods to minimize its risks and to detect remaining violations of law. These sorts of responses—as measured by adherence to lean compliance and other risk management principles—reflect the types of responses that should be demanded of organizations in circumstances where they act affirmatively in ways that raise risks of illegal activities.

Corporate actions raising risks of illegal conduct are only reasonable where they are accompanied by corresponding efforts to contain the risks and to respond to the dangers to the public the corporations are creating. No person driving to the store would be surprised that the law requires his brakes to be in order and that he may be held liable if he crashes into another car due to a brake failure after he has taken less than reasonable action to maintain his brakes and prevent brakerelated collisions. The law should require the same sorts of preventive actions of corporations having business practices that increase risks of illegal conduct and public injuries. The creation of such risks should not be illegal in itself as many valuable corporate actions involve associated risks to the public. However, the creation of new public risks through corporate action without associated corporate efforts to contain these risks and ameliorate their impacts is negligent. Legal standards in many fields could be improved by recognizing this principle for measuring organizational negligence and by implementing standards, which require lean compliance practices in conjunction with legally restricted corporate activities.

B. Applying Lean Compliance Principles to Broader Legal Management Challenges

While the emphasis in this Article has been primarily on the use of lean compliance methods to prevent corporate crimes, lean compliance practices can be valuable to corporations and other organizations in much broader legal management settings. Lean compliance methods will be valuable where uncertainty hinders corporate efforts to gain some legal advantage or to avoid potential liability. These include a wide variety of legally significant activities from qualifying for special legal rights to avoiding damage liability to complying with complex legal requirements. Where there exists uncertainty as to the conduct that will best advance a company or organization's legal position, lean compliance practices can serve a valuable role by resolving the uncertainty and establishing tested, validated practices for achieving desirable legal results.

As means to gain corporate legal advantages in these sorts of diverse legal settings, lean compliance methods should appeal to company managers in traditional management terms. Lean compliance methods for shaping corporate performance have the potential to produce better, more valuable legal results and lower liability costs than alternative legal management practices that do not accommodate high legal uncertainty. Evidence from other business areas suggests that lean management practices are generally applicable means for addressing and resolving uncertainties about desirable future conduct. Law compliance efforts are among the many business practices that can benefit from the uncertainty reductions achievable via lean management. By avoiding over-commitments to potentially ineffective practices and testing and improving the effectiveness of practices as they are used, lean management techniques applied to the construction and operation of law compliance efforts can lead companies to successful compliance techniques despite initial uncertainty regarding how to formulate such techniques.

Most alternative law compliance practices will be less successful than lean compliance in dealing with uncertain circumstances because the alternatives depend on predicting how to proceed to achieve future law compliance. Prediction of successful law compliance practices amidst high legal uncertainty will often produce false hopes of compliance and false reassurances that such compliance has been realized. Lean compliance provides a solution to this problem by substituting learning for prediction.⁸⁹ By proceeding tentatively via validated learning concerning successful practices, companies can move

^{89.} If constructed with this validated learning perspective, lean compliance practices and methods used to monitor, evaluate, and revise company legal practices can implement legal management across many aspects of corporate legal affairs. The result will be an ongoing engine of legal affairs management and adjustment that should help to ensure that company practices are addressing the current legal reality of a firm and its present legal challenges. Such a properly tailored and current system offers each company its best chance of achieving optimal legal results and avoiding unnecessary costs and adverse impacts from illegal corporate conduct. It also will help a com-

carefully through the fog of legal uncertainty along imperfectly perceived paths to compliance success. Used as a practical tool for avoiding liability, validated compliance learning has potential applications and benefits that are as broad as the legal uncertainties and associated corporate threats that now confront many modern corporations.⁹⁰

C. Continuing to Learn from Startup Companies

Expanding interest in the business community regarding lean management methods has stemmed largely from recognition and systemization of lean management methods in startup companies. Lean management has proven to be a highly successful way—in some settings perhaps the only systematic way—for startup companies to define successful businesses activities amidst highly uncertain performance constraints and goals. The specification of the practices underlying lean management has progressed quickly, driven primarily by the path breaking work of Eric Ries as described in his text The Lean Startup.⁹¹ In this text, Ries used his own experiences with several startup companies to describe generally applicable methods for applying lean management methods in startup companies. The lean management framework described in The Lean Startup has inspired many other commentators from the startup community and other organizational contexts (like governmental agencies) to consider how lean management ap-

pany to maximize legal rights and other legal positions that are available in the course of the company's business activities.

^{90.} For companies that have previously pursued compliance efforts aggressively, adopting lean compliance management may entail only small changes in prior practices. As already discussed, legal requirements and management best practices standards for compliance programs have emphasized for some time the importance of including program monitoring, evaluation, and revision elements in broader compliance programs. Many companies have already responded to this guidance and built compliance systems with substantial testing, monitoring, and revision elements of the sort also required under lean compliance management. Lean management adds one important overarching component to these features. It encourages company managers to link these system components as part of learning and improvement processes. That is, to view the overall objective of these multiple components as being to learn the best way to comply with legal standards in a company's particular legal circumstances.

^{91.} Ries, supra note 4, at 8.

proaches can be used to shape diverse organizational practices.

The emergence from startup companies of new knowledge about lean management practices seems likely to continue for some time. As parties operating startup companies bring lean management techniques to bear regarding new technology and new business domains—often in conjunction with developing new methods for testing and evaluating the success of new business practices—the range of useful business practices based on lean management principles will continue to grow.

In a sense, lean management itself is undergoing a period of validated learning, with the heart of that learning occurring in startup company settings. Techniques developed and shown to be effective in startup companies provide candidate techniques for use and testing elsewhere. The extension of lean management methods into the compliance sphere as proposed in this Article is part of this expansion and testing process. This extension takes what we have learned in startup companies and brings the resulting techniques into compliance settings for further application. Learning in startups provides the groundwork for further learning about compliance techniques.

Eventually, these learning processes may transfer knowledge in the opposite direction. Practices proven effective in compliance programs may be useful in resolving and overcoming uncertainties in startup businesses. Practices defined and tested in compliance programs will contribute to the lean management tool kit, available for application in combatting performance uncertainties elsewhere.

For now, the net learning flow seems likely to run from startups to compliance settings for some time. Managers of startups have compelling reasons—in both the complexity of their new business models and the profitability of successful business methods if they can be found—to try many lean techniques for overcoming startup business uncertainties. The intensity of the forces driving new management efforts in this realm make it likely that more practices will be tested and more successes found in startup company contexts than in other business settings.

Rapid learning about lean practices in startup settings offers potential benefits to business managers dealing with performance uncertainties everywhere. Corporate managers in many domains—including corporate compliance specialists are beneficiaries of the new learning emerging from startup companies about how to use validated learning to identify and perfect successful business practices.

Lean management defines a generally applicable framework for systematic responses to the vague and uncertain reality of present laws and legal threats. By keeping their eyes open to new lean management methods emerging from startup companies and other settings where lean management methods are used, corporate managers and compliance specialists can ensure that these important management methods are used to their full effect in promoting lawful corporate conduct and achieving lean law compliance.

Learning about lean management methods is centrally important in balancing complex corporate activities raising uncertain law compliance challenges with matching methods for preventing illegal corporate conduct. By building on the track record of startup companies—as well as developing additional lean management methods especially suited to legal uncertainties and challenges—companies can bring the full force of lean management and validated learning to bear on the difficult corporate law compliance problems of our age of legal uncertainty.