



ORGANIZATIONAL PERFORMANCE

What a difference a word makes: Understanding threats to performance in a VUCA world

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Abstract VUCA is an acronym that has recently found its way into the business lexicon. The components it refers to—volatility, uncertainty, complexity, and ambiguity—are words that have been variously used to describe an environment which defies confident diagnosis and befuddles executives. In a ‘VUCA world,’ both pundits and executives have said, core activities essential to driving organizational performance—like strategic planning—are viewed as mere exercises in futility. VUCA conditions render useless any efforts to understand the future and to plan responses. When leaders are left with little to do other than wring their hands, organizational performance quickly falls at risk. In this installment of Organizational Performance, we demonstrate that by overlooking important differences in the conditions that volatility, uncertainty, complexity, and ambiguity describe, we have disempowered leaders. We show how leaders can appreciate the differences among each of these challenging situations in order to properly allocate scarce resources to preserve and enhance organizational performance.

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1. Living in a VUCA world

“Across many industries, a rising tide of volatility, uncertainty, and business complexity is roiling markets and changing the nature of competition.” (Doheny, Nagali, & Weig, 2012)

Observations such as this, from a recent issue of the *McKinsey Quarterly*, have been used to energize leaders as they rise to confront yet another day in

unpredictable times—as well as to sell these same leaders consulting services. Employing an acronym for volatility, uncertainty, complexity, and ambiguity¹ (VUCA), pundits and leaders alike have asserted that we now live in a ‘VUCA world.’ This ongoing churn in the business environment creates myriad traps for leaders. Of course, optimists see the edge a company can gain if its leaders master the accompanying challenges. For example:

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¹ The acronym VUCA originated in the U.S. military (Whiteman, 1998).

"Volatility provides profit opportunity." (Warwick-Ching, 2013)

"Uncertainty is opportunity." (Hemingway & Marquart, 2013)

"Simplifying IT complexity [is] a major opportunity." (Boston Consulting Group, 2013)

"Ambiguity equals opportunity." (Amerasia Consulting Group, 2013)

Capitalizing on opportunity first requires understanding it; reviewing what leaders have said and done thus far, however, there is ample evidence of misunderstanding. Three significant problems exist in how leaders have employed these terms. First, their use has been cavalier: VUCA has become a cute, trendy way of saying 'unpredictable change.' As an experiment, perform a web search for any two of the four words comprising VUCA. You'll probably realize two things: all four are typically used as a set in executive interviews, consultant blogs, and the business press, and they're treated as synonyms. Though the words do have related meanings, it's the differences among them that are most valuable for leaders to understand. We contend that the term VUCA offers a *mélange* that is dangerous in its consequences. The four components of the VUCA acronym have unique meanings that should be instructive to leaders; instead, useful differences between the terms are glossed over and their value lost.

Second, even when pundits and leaders are sensitive to the differences in meaning, there is a lack of information regarding just what it is that leaders should do in order to confront one or another of these conditions. Executives often mention in interviews and press releases the difficulties of "doing business in a VUCA world," but quickly move on to simpler topics without discussing exactly how a firm can position itself in such an environment. Those few that do consider how to deal with VUCA typically offer one highly general solution for all four of its components, such as "innovate," "be creative," "be flexible," or "listen more." History does not offer many examples of such pabulum producing great leaders, effective change, or robust organizations.

Finally—and likely because there is a dearth of actionable advice out there—too many leaders are confronting this VUCA world by simply throwing up their hands. As one executive told us, strategic planning is idle at his company because, after all, "How can you plan anything in such a VUCA world?" Indeed, a growing thought leadership movement asserts that due to the complete chaos and uncontrollability of the VUCA world, 'obsolete' ideas such

as strategy and marketing are now 'dead' (Draycott, 2012).

Consider these three problems and it is evident that the second and third are not unavoidable consequences of the modern business world, but rather entirely avoidable outcomes of the first. That is, we have little actionable advice to deal with VUCA and are tempted to say there's nothing we can do about it *specifically because* we don't break out the components of VUCA and fully understand the exact natures of the problems we face. Until leaders become able to identify the unique challenges presented by volatility, uncertainty, complexity, and ambiguity, they will not be positioned to seize the opportunities promised by the aforementioned optimists. This is because volatility, uncertainty, complexity, and ambiguity all require their own separate and unique responses. Each of the four is a distinct phenomenon with equally distinct appropriate responses that require different—and possibly difficult to reallocate—investments. Leaders face a pair of problems: If VUCA is seen as general, unavoidable, and unsolvable, leaders will take no action and fail to solve an actual problem. Alternatively, if leaders misread the environment and prepare for the wrong challenge, they will misdirect resources and fail to address the actual problem.

In the paragraphs that follow, we begin by pointing out the differences between the terms volatility, uncertainty, complexity, and ambiguity. There are non-trivial, albeit nuanced, differences in the meanings of these words—such as the military has taken to teaching at the Army War College. Then, we discuss how to identify VUCA situations in the organizational environment and distinguish exactly which type of unpredictability is being experienced. Finally, we discuss the ways leaders need to position their companies to address these singularly: each requires something different from the company and its leadership. As we will explain, you cannot recognize the hidden opportunity (e.g., in complexity) by misdirecting resources (e.g., addressing the threat from ambiguity). Failure to use the right label will lead to a misallocation of what could be considerable corporate resources. Table 1 summarizes our key thoughts regarding volatility, uncertainty, complexity, and ambiguity.

2. What do these terms mean. . .and what do they mean for your company?

2.1. Volatility

Reid Spencer is a division manager for a technology company in Cambridge, Massachusetts. The industry

Table 1. Distinctions within the VUCA framework

	What it is	An example	How to effectively address it
Volatility	Relatively unstable change; information is available and the situation is understandable, but change is frequent and sometimes unpredictable.	Commodity pricing is often quite volatile; jet fuel costs, for instance, have been quite volatile in the 21 st century.	Agility is key to coping with volatility. Resources should be aggressively directed toward building slack and creating the potential for future flexibility.
Uncertainty	A lack of knowledge as to whether an event will have meaningful ramifications; cause and effect are understood, but it is unknown if an event will create significant change.	Anti-terrorism initiatives are generally plagued with uncertainty; we understand many causes of terrorism, but not exactly when and how they could spur attacks.	Information is critical to reducing uncertainty. Firms should move beyond existing information sources to both gather new data and consider it from new perspectives.
Complexity	Many interconnected parts forming an elaborate network of information and procedures; often multiform and convoluted, but not necessarily involving change.	Moving into foreign markets is frequently complex; doing business in new countries often involves navigating a complex web of tariffs, laws, regulations, and logistics issues.	Restructuring internal company operations to match the external complexity is the most effective and efficient way to address it. Firms should attempt to 'match' their own operations and processes to mirror environmental complexities.
Ambiguity	A lack of knowledge as to 'the basic rules of the game'; cause and effect are not understood and there is no precedent for making predictions as to what to expect.	The transition from print to digital media has been very ambiguous; companies are still learning how customers will access and experience data and entertainment given new technologies.	Experimentation is necessary for reducing ambiguity. Only through intelligent experimentation can firm leaders determine what strategies are and are not beneficial in situations where the former rules of business no longer apply.

is highly competitive and speed is a key competency for both leaders and their organizations. Like others in similar positions, Reid has a lot on his plate and only so much bandwidth. Among today's concerns is the impact a fire at a large computer chip production facility will have on the prices charged by one of his key suppliers. Margins are thin, and upon approaching his boss for advice, Reid is told merely: "In a VUCA world, we have to innovate!"

A *volatile* situation can be defined as one that is unstable or unpredictable; it does not necessarily involve complex structure, a critical lack of knowledge, or doubt about what outcomes may result from key events. Rather, volatility most closely represents the general definition of VUCA commonly used in the business press: relatively unstable change. A manager facing a volatile situation like Reid's seeks to address certain questions: Will the situation create a spike in prices? If so, how high? And how long will the elevated prices last? The production facility fire introduces cost volatility, but Reid still maintains several useful—perhaps critical—assets as he attempts to manage the situation: he understands both the situation

itself and the likely associated causes and effects. Reid knows that the fire could cause price increases, he knows the history of price fluctuations for the computer chip, and he likely has a good idea of what has caused these trends. He has information on other suppliers for the chip and how many other production facilities for the part exist within the key supplier. The secret to dealing with volatility, as with any component of VUCA, is understanding the opportunities and threats inherent in the situation.

Not long ago, pundits widely credited Southwest Airlines' decision to hedge on jet fuel as a key toward supporting the company's low-cost operating strategy (Brooks, 2010). Fuel prices can be quite volatile, but not really VUCA. Southwest was not faced with significant deficits of knowledge or overwhelming complexity; rather, it recognized that environmental factors beyond its control were lining up to cause a highly volatile fuel market. Southwest knew change was coming, and what was causing that change. It required a strategy to deal with that change, for which eventual existence was expected but magnitude was

unknown. The company prospered during this period of change by leveraging its *agility*, the key to handling volatility.

When volatile change is expected, the best way to prepare is to devote resources toward developing agility. This is typically expensive and consists, for example, of stockpiling resources. Hedging on fuel, overbuying talent, and amassing raw materials allows the slack to be agile—should volatile times suddenly suggest that is the right move. As previously mentioned, Southwest Airlines embarked on a massive fuel-hedging plan that baffled its competitors, predicting the fuel market volatility and leveraging its assets to create future agility. As most of Southwest's competitors hedged only 20%–30% of their fuel purchases, limiting their eventual agility, Southwest hedged a massive 70% of its total need. The end result was that Southwest ended up paying as much as 50% less for fuel than its competitors, and has arguably been the only consistently profitable airline for most of the 21st century.

Southwest correctly forecast the volatility in fuel prices while prices were still low, and acted aggressively to maintain its agility. We propose that this agility is the key to dealing with environmental volatility. When change is coming but its magnitude, direction, and length are unknown, effective organizational leaders build their slack resource availability, preparing for a potentially 'long winter.' In the short term, this is often expensive and seemingly unneeded. However, if a market truly is volatile, it's the definitive prescription for success in the long term.

2.2. Uncertainty

In a separate market, Reid is anxious to learn more about the precise capabilities of a product about to be launched by a worthy Asia-based competitor. It could be that the new product changes the game—and it could have strong implications for how he manages his research and development dollars. A senior manager in this division of Reid's company, speaking to a trade publication about the impending challenge this product may bring, was quoted as saying: "It's a VUCA world. We're going to have to be flexible."

Uncertainty is a term used to describe a situation characterized by a lack of knowledge, not as to cause and effect but rather pertaining to whether a certain event is significant enough to constitute a meaningful cause. Uncertainty is not volatility. A volatile situation is one in which change is likely, but that change may come quickly and at varying magnitudes; an uncertain situation, on the other hand, is not so volatile—in fact, there may be no change

inherent in it at all. For instance, Reid is uncertain about the pending product to be offered by his Asian competitor. There is nothing volatile here; he simply does not know enough to plan a best response. The solution to volatility is agility and building slack resources, but there is not enough information in an uncertain situation to indicate that this would be an appropriate response. If there is not enough information to indicate that volatile change is approaching, stockpiling resources could be a costly waste of time.

Because uncertainty exists in the lack of adequate information, addressing it simply involves obtaining information. Investment here entails methods of collecting, interpreting, and sharing information. Uncertainty can be solved structurally by devoting more resources to boundary-spanning activities: moving beyond existing networks, data sources, and analysis processes to gather information from new partners and look at it differently. Information networks are created from many different sources, both inside and outside the firm.

This principle is well illustrated by the aftermath of the 2001 U.S. terror attacks. Since those events, the world has lived with a greater sense of uncertainty regarding if, when, and where a next attack could occur. To again reinforce distinctions between the different components of VUCA, we note that the post-9/11 situation was not necessarily volatile: the core issue facing the world's governments was not a lack of stability or predictability. Rather, government leaders realized that the success of the attacks on the World Trade Center might encourage other terrorists to create similar plots. How many more attacks might we face? When and where might these attacks occur? Who might be behind them? This was the core of the West's uncertainty—but not necessarily a volatile situation, nor a totally ambiguous one, nor an overly complex one. Addressing the uncertainty regarding the strategies of potential terrorists has led governments around the world to collect and cull through unimaginable amounts of information. New partnerships were formed and information networks established, resulting in a relatively successful anti-terror campaign. The key to the West's success in rebuffing more attacks in the style of 9/11 has been uncertainty reduction through relentless information gathering.

Although Reid has likely heard the general advice to "be flexible" countless times regarding VUCA issues, his best course of action may be to actively grow his information collection and data processing resources. He lacks precise information about the capabilities of the new product, and needs to gather that data. Further, he needs to reach out to partners, customers, researchers, trade groups, and

perhaps even competitors to better understand how this new innovation might or might not change the marketplace. Will the product's launch be more comparable to that of the iPod (a game changer) or that of the Segway personal transporter (market impact did not match pre-reveal hyperbole)? What are the specifications of the new product, how do they compare to the current market, and what impact should it have on the firm's own research and development direction and budget? These are all questions that can be answered by information gathering, making an uncertain situation more certain—and certainly more manageable.

2.3. Complexity

Meanwhile, efforts to grow markets abroad have been frustrating because of a variety of considerations such as export control, tariffs, and the intransigence of officials in each market. Reid often feels overwhelmed by the sheer number of moving parts involved in each market, and his staff struggles to keep up with all of the associated regulations and other idiosyncrasies. Reid looks to trade journals for guidance, and is struck by a columnist who writes: "It's a VUCA world, and dealing with multiple markets is just part of that. You can succeed in this VUCA environment by being creative."

A complex situation is characterized by many interconnected parts. Again, this is distinct from a volatile or an uncertain situation. The situation Reid faces in regard to the regulatory environments and political climates in the many nations where his company does business is indeed complex, but not necessarily volatile or uncertain. There is no unpredictable or unstable change implied in this situation, and Reid is not faced with a lack of key information. Indeed, he has a great deal of hard information on regulations, tariffs, and the like, but is overwhelmed by the need to process it all. In complex situations, a great deal of effort is required to collect, digest, and understand the relevant information in its entirety.

A complex situation calls for a uniquely distinct response that is utterly separate from those necessitated by the other components of VUCA. This highlights the danger of not properly understanding and defining firm challenges. Although effective in volatile situations, stockpiling resources is useless if a firm does not understand where best to allocate them in a complex environment. Similarly, establishing new information networks, as a firm should do in times of uncertainty, risks an even greater degree of information overload, which can cause firms to 'freeze' and not make any decisions at all.

Instead, the most straightforward way for an organization to address complexity is to simplify the situation by adopting a structure that mirrors that of the environment. Research has consistently shown organizations that adapt themselves to 'match' environmental change perform at substantially higher levels, whereas firms that maintain past structures and processes in the face of a changing business environment are less effective (Heugens & Lander, 2009). Organizations should be structured to align with and take advantage of environmental complexity rather than struggle against it.

In the most obvious example, as a small, informal organization grows, it is expected that formal departments will appear to address what has become too much for a single person to handle. A smaller operation dealing with a smaller group of suppliers, a smaller customer base, and fewer regulations works best within a relatively simple organizational structure, but that structure becomes obsolete as the organization grows and—consequently—the organization's operating environment becomes more complex. Finance, operations, marketing, and human resources functions are established so that each part of the organization addresses something in which it has expertise. As the organization grows larger, complexity will increase and departments may divide further: the human resources department may hire specialists in benefits, compensation administration, and EEO compliance. Causes of this internal restructuring should not be limited to changes *within* the organization; changes in increasingly complex business environments (i.e., changes *outside* the organization) also indicate a need for internal change. For instance, many organizations in the U.S. are restructuring their operations in terms of employee benefits due to the onset of healthcare reform. The new healthcare law is tremendously complex, and many leaders are finding that the most efficient solution to cope with it is to restructure the relevant parts of their firms to better align with its requirements.

In Reid's situation, his firm's growth into so many new markets creates a complexity that might best be resolved by moving to a more geographically based organizational structure, such that different branches of the company are able to specialize in understanding and exploiting market regulations and idiosyncrasies. It seems his company's involvement in multiple markets has created an untenable complexity for the current organizational structure. To reiterate, the preferred solutions for volatile and uncertain situations are not relevant here: instead of stockpiling unneeded resources or gathering redundant information, the firm's most efficient

course of action is to restructure itself to align with the new environmental complexity.

2.4. Ambiguity

Finally, Reid tries to carve out time each day to ponder whether or not an innovative product currently under development is likely to catch on. Although it is unlike anything on the market today, it isn't clear that customers will see the value proposition the product provides. He can't afford to escalate commitment to the product if it isn't going to be a hit. He reads a marketing blog for advice and learns that "The VUCA world is pure chaos. Successful firms avoid over-planning and make things up as they go."

Ambiguity characterizes situations where there is doubt about the nature of cause-and-effect relationships. Looking at Reid's situation, it is easy to see how this is distinct from the other components of VUCA. It's not volatile: there is no reason for Reid to expect quick, unpredictable, unstable change. It's not complex: there aren't an overwhelming number of moving parts here, just a lack of understanding as to what will happen next. And that lack of understanding is distinct from uncertainty: in a merely uncertain situation, you have a good idea of what causes what. An ambiguous situation, on the other hand, typically revolves around a wholly new product, market, innovation, or opportunity. In an uncertain situation, you can predict what may happen if you gather adequate information. An ambiguous situation is more challenging because of the newness: there is little historical precedent for determining the outcomes of certain causes or courses of action.

Stockpiling resources, while appropriate for volatile situations, could be a huge waste of time and energy in an ambiguous situation. Gathering information is similarly unhelpful when a situation is ambiguous, as you likely don't know what information would be most useful to gather. Likewise, a company restructuring could be enormously inefficient if the firm doesn't really understand what that restructuring might lead to. The fourth component of VUCA continues the overall trend: the solution that works for one part of VUCA likely won't work for the other three. Each dimension of VUCA is distinct and unique, and requires a different optimal course of action. In the case of ambiguity, we believe the key to success is experimentation—not slack resources, information gathering, or restructuring.

Recall that ambiguous situations are those in which the relationship between cause-and-effect is uncertain. Such could be said of the challenge

the digital revolution is presenting traditional print publishers: how news junkies will want to stay informed, how students will want to get their learning materials, and how lovers of fiction will want to discover new authors are factors that will require the industry to adopt a mindset of experimentation. Further, technology allows content providers to entirely circumvent traditional publishers. It is unclear what the revenue model that maximizes return will be. Successful publishers, small and large, have thus far responded to this ambiguity with experimentation and a willingness to take risks. In an industry not typically recognized for groundbreaking innovation, publishers have created bundled contracts for authors with both traditional publishing and e-books, offered bonus content to customers who purchase e-books through their own digital marketplaces, embedded exclusive videos within their e-books, and even offered book chapters or whole books for free (for a limited time) in order to entice new readers. What will work as a business model 10 years from now? The only way these publishers can find out is to experiment with the unprecedented.

The potential impact of his company's new product is very ambiguous to Reid. Being such a departure from what the company is known for, predicting customer reaction to the product is difficult; accurately forecasting associated supply processes and needs may also prove problematic. Reid's best option may be experimentation. For example, his company can introduce individual features from the new product into existing products, experimenting with customer receptivity. Furthermore, his firm may contract out—to a variety of suppliers—input processes required by these new features, experimenting with different supply flows and partners. The key here is options. Reid isn't locked into any one plan without knowledge of cause and effect; that would be risky for the firm. Instead, he spreads out his resources, trying many different new strategies and analyzing each carefully until he can determine with some confidence exactly which will be best suited to the market environment.

3. Final thoughts

It isn't just Reid Spencer who suffers from a daunting agenda. There is broad consensus that these are challenging times for leaders. Globalization has created opportunities with one hand as it has introduced threats with the other. The stubborn global recession has blunted repeated bursts of optimism for the return to a path of prosperity. Layer on the

challenge of digesting technological advancements that impact industry, as well as the consequences of demographic shifts in the workforce, and there can be little doubt that leaders have their hands full. Recognizing and then addressing the myriad factors that can threaten organizational performance is not getting any easier. It's a VUCA world, after all.

So what are leaders to do to preserve and enhance their companies' performance? Consolation can be found in that we are all enduring this VUCA world together; after all, misery loves company. Or we can choose to celebrate our capacity for language and the power words have, when carefully applied, to point us toward purposeful action. Of course, the components of VUCA are often present in some combination; for instance, a new product market might be both volatile and ambiguous, or expansion into a new territory in the midst of sweeping governmental change might be both complex and uncertain. Although combinations of VUCA elements are—well, complex—we believe that the solutions we propose to the components of VUCA are worthwhile, both on their own and in combination. Left untangled, the mess implied by the phrase VUCA presents an unsolvable frustration. Developing the discipline to carefully diagnose and label a situation for what it is, however, offers a salve. Leaders need to work to develop this discipline; organizational performance cannot be preserved, let alone enhanced, if its finite resources are misappropriated to address a phantom threat.

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