

Using A VUCA Analysis to Assess a Turbulent and Rapidly Changing Public Health Environment

John W. Moran, Ph.D.

Senior AI and Quality Advisor, Public Health Foundation

November, 2025

“The greatest danger in times of turbulence, is not the turbulence, it’s acting with yesterday’s logic.” - Peter Drucker¹

Every day we encounter situations involving Volatility, Uncertainty, Complexity, and Ambiguity (VUCA) in our personal and organizational life. How we respond depends on the amount of information we have about the situations and our assessment of the risks involved.

VUCA was first defined in 1985 based on the leadership theories of Warren Bennis and Burt Nanus in their book *Leaders: The Strategies For Taking Charge*². In 1991, the U.S. Army War College decided to use the VUCA acronym to help students (typically senior military officers) characterize the turbulence they would face as they took on increasingly strategic leadership positions³.

A VUCA Analysis can be of assistance when we finish a SWOT Analysis or SWOT/IE⁴ as part of a strategic planning process. It is useful to complete a risk assessment to understand the uncertainty and complexity surrounding assumptions, weaknesses, opportunities, and threats determined during the planning process. The VUCA Analysis Tool can also be used to help analyze the current operating environment and the complex situations encountered on a regular basis.

Table 1 shows a way to analyze a situation that may be dynamic, complex, and changing rapidly. The table helps illustrate what parts of the VUCA are impacting the situation you are dealing with and helps with development of actions to the various unknowns that are part of the situation.

¹ <https://barri Bramley.com/the-danger-in-times-of-turbulence-is-acting-with-yesterdays-logic/>, Accessed 11/01/2025

² <https://www.vuca-world.org/where-does-the-term-vuca-come-from/>, Accessed 11/01/2025

³ <https://www.indigoanchor.com/blog/2019/10/31/on-the-origins-of-vuca-and-how-it-affects-decision-making>, Accessed 11/01/2025

⁴ <https://phf.org/tools-resources/swotie/>, Accessed 11/01/2025

How To Analyze A VUCA Situation

Describe the Situation:

Describe the Unknowns	Degree of Volatility	Degree of Uncertainty	Degree of Complexity	Degree of Ambiguity	VUCA Total Score	Potential Actions to be Taken

Scoring
 0 – None
 1 – Low
 3 – Medium
 5 – High
 7 – Extremely Dynamic and Complex

Table 1

The components of VUCA are defined below:

- **V**olatility refers to the likelihood that something is unpredictable and will change rapidly. Things are uncertain, unstable, and dynamic.
- **U**ncertainty refers to the extent to which organizations can confidently foresee future events and issues that may adversely impact organizational performance. The more uncertain the environment is, the harder it is to predict what may happen.
- **C**omplexity refers to the factors that may be intricate, complicated, and intertwined in a situation. Because of this, cause-and-effect relationships are not clear.
- **A**mbiguity means there is a lack of clarity and you may need to be open to more than one approach.

While you personally cannot control a volatile or rapidly changing complex situation, you can control how you react to it. The quote at the beginning by Peter Drucker - “The greatest danger in times of turbulence, is not the turbulence, it’s acting with yesterday’s logic” is a trap we all fall into. Using the VUCA Analysis of a situation helps decision makers stop acting with yesterday’s logic and approach the situation using VUCA logic. VUCA logic has us first define the unknowns in the situation and then analyze them before initiating any action.

The VUCA Analysis Tool is a way to quickly analyze a volatile or complex situation and start developing potential action steps. Taking these potential action steps will lead us to

other logical action steps. Using **Table 1** helps to illustrate how all of the VUCA items interact as a whole and not in isolation. This helps a leader to focus on an overall response, rather than becoming focused on only one of the VUCA items.

The example in **Table 2** is of a government leader facing a rapidly developing community disaster. This disaster could be a flood, fire, pandemic, toxic chemical release, or other emerging situation. As shown in **Table 2**, after analyzing and scoring the VUCA items, the initial action steps would be, first, to understand what the disaster is and the extent of it. Once that is known, determine if the agency is involved. The second step would be to determine who to coordinate with to provide resources.

<h2 style="color: purple;">How To Analyze A VUCA Situation</h2>						
Describe the Situation:						
Describe the Unknowns	Degree of Volatility	Degree of Uncertainty	Degree of Complexity	Degree of Ambiguity	VUCA Total Score	Potential Actions to be Taken
Extent of disaster	7	5	3	1	16	Check the TV Contact the Fire and Police
Do we have the skills to handle it?	1	5	1	3	10	Check with the EMO Center
Do we have the necessary staff?	1	5	1	1	8	Check with HR
Who do we coordinate with?	3	3	5	3	14	Activate the Emergency Operations Center
Are there community volunteers to help?	5	0	3	3	11	Activate the Community Emergency Response Team
Others						

Scoring
0 – None
1 – Low
3 – Medium
5 – High
7 – Extremely Dynamic and Complex

Table 2

During the disaster, it is useful to keep evaluating the VUCA items since the scoring will change and other VUCA items may become more important as clarity emerges on some of the first unknowns.

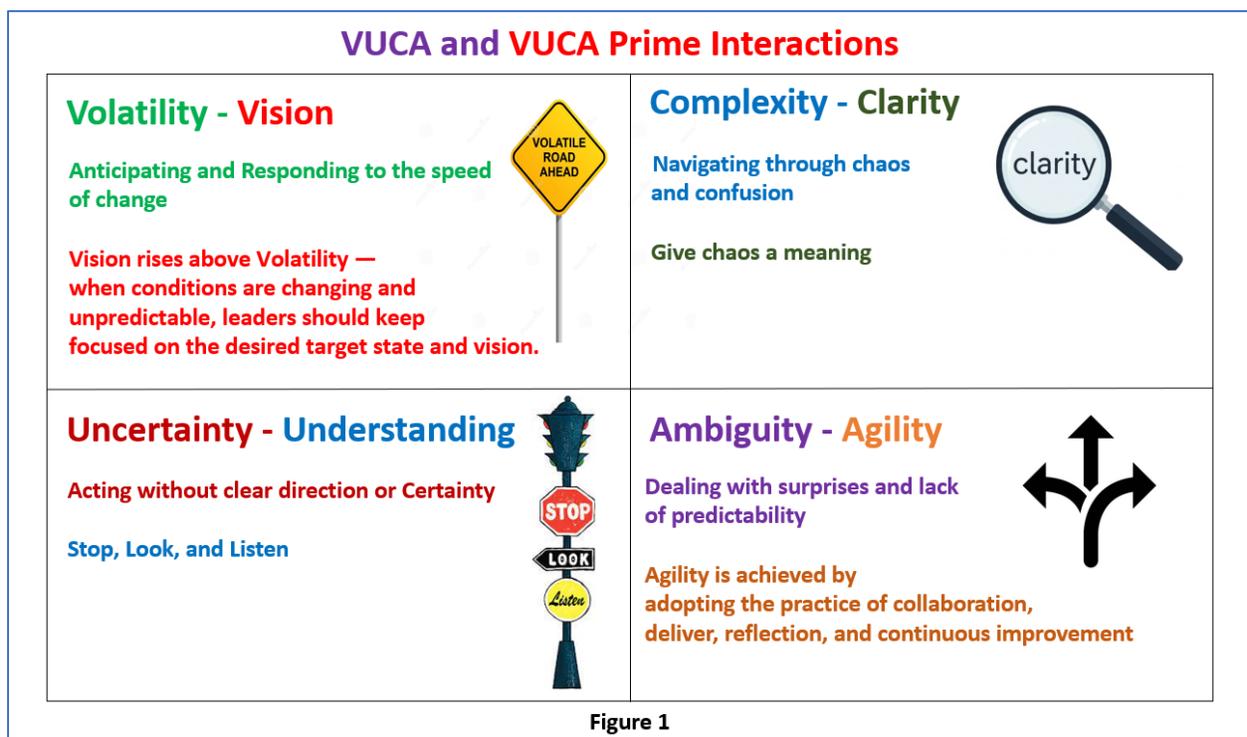
To expand the use of VUCA, Robert Johansen introduced VUCA Prime in 2007, a behavioral leadership model designed to counteract each of the four elements of VUCA with a specific positive response. The VUCA Prime elements are⁵:

- **Vision rises above Volatility** — Provide a compelling vision and purpose for change. Stay focused on the desired future state even when conditions shift unpredictably.

⁵ <https://aclinstitute.com/newsroom/vuca-vuca-prime-bani/>, Accessed 11/10/2025

- **Understanding reduces Uncertainty** — Explore and experiment to drive understanding. When uncertainty is encountered, investigate external political, economic, social, technological, legislative, and environmental (PESTLE) factors⁶ to increase insight and reduce ambiguity.
- **Clarity counters Complexity** — Simplify where possible. Break down challenges so decisions are clear and actionable.
- **Agility overcomes Ambiguity** — Adapt your approach. Pivot quickly when faced with multiple possible outcomes.

Because the forces of VUCA and VUCA Prime operate in a dynamic balance, leaders must learn how to harmonize the energy of either side with its complement. **Figure 1** shows how VUCA and VUCA Prime interact with each other.



Summary:

The VUCA Analysis is a conceptual framework that underscores the conditions and challenges organizations face when making decisions, planning, managing risks, driving change, and solving problems. It primarily shapes an organization's ability to:

1. Anticipate the key issues that emerge regularly. Build an information database on these key issues so that when they arise you will have knowledge to draw upon before taking any action.

⁶ <https://phf.org/tools-resources/pestle-chart/>, Accessed 11/01/2025

2. Understand the repercussions of issues and actions on the organization and the community. What will be the effects of my actions?
3. Appreciate how variables interrelate and understand cause-and-effect relationships.
4. Prepare the organization to handle diverse scenarios and challenges by conducting regular tabletop exercises and using the After-Action Reports to make necessary changes before the actual situation emerges.

VUCA serves as a guideline for fostering awareness and preparedness in health departments and state and local government. It provides a roadmap for organizations to develop strategies for readiness, foresight, adaptation, and proactive intervention before a situation arises.

Remember - "Deciding what not to do is as important as deciding what to do."
Jessica Jackley."⁷

⁷ <https://www.briantracy.com/blog/leadership-success/leadership-quotes-for-inspiration/>, Accessed 11/01/2025