



Back to the Future ... It's still about Managing Ambiguity!

Preface

As part of the APEX applied research program, I am proud to present the results of an exploratory study of 600 federal Public Service executives' self-assessments on managing uncertainty and ambiguity. Co-authored by a renowned leadership expert, Dr. Randall P. White, the report identifies several factors that enhance and derail effective leadership behaviour in an ever-changing and turbulent post-COVID Public Service context. Many of the factors are familiar, as you will see some research references dating back more than 30 years. However, context matters, and some of those lessons still apply today, hence the retro title *Back to the Future*. Enjoy, and please send your comments to jamesk@apex.gc.ca.

Dr. James Kendrick, PhD
APEX Chief Research Officer and report co-author.

Introduction

According to a 2022 Fortune/Deloitte CEO survey, uncertainty, ambiguity, complexity and navigating change are significant concerns weighing on the minds of top leaders who are “fine-tuning strategic levers such as talent, workplace, and technology models to adopt to new conditions.”¹

The popular business press and academic literature have reported an increasing inability of leaders to grasp the world and deal with the multitude of things happening around them, including geo-political shifts, competing priorities, rapid technological change, disruption, complexity, hyper-competition, high-velocity markets, and stakeholder expectations. For example, a January 2019 *Harvard Business Review* article described the difficulty leaders at all levels face when they are “in situations where the organizational strategy and context are unclear, in flux, or constantly changing”.²

More than two decades ago, in their path-setting research, Hodgson and White (2001) wrote that “uncertainty can cause stress, poor decision-making, and impact organizational performance”.³ Denison et al (1995) concluded that “to navigate ambiguity and address various demands, leaders must adapt their leadership behaviour to match the situation and context.”⁴

Today, people are experiencing accelerated change at work and in their lives as we recover from the COVID pandemic and its rippling effects. Van der Hoek (2021) wrote about how “contextual ambiguity is shaping many public organizations, which creates extra demands on leaders” and yet “whether or how they adapt remains largely unknown”.⁵



Canadian federal Public Service executives face several challenges including managing a hybrid workforce, spending cuts and fiscal budget restraints, calls to modernize and achieve more outstanding results, and defining the Future of work. Additionally, the 2021 APEX Executive Work and Health Survey showed evidence of the strain; more than 75% of executives reported moderate to severe burnout, less than 50% felt engaged in their work, and 69% reported an imbalance in terms of effort versus reward.⁶ Clearly, we must learn more about how Public Service leaders manage ambiguity and uncertainty for themselves, their employees and their organizations.

The Methodology

In 2022, as part of its applied research plan, APEX undertook an exploratory study to document and benchmark how Canadian federal Public Service executives assess their abilities to manage change, ambiguity, and uncertainty. Based on our initial review of the literature, very little research has documented any evidence of the capacity of Public Service executives to manage ambiguity and the uncertainty that results from dealing with it.

The co-researchers undertook a study on behalf of APEX to help address this void using a well-established online self-report version of the *Ambiguity Architect* (Hodgson and White, 2001) to gather data and comments from more than 600 federal Public Service executives in the Official language of their choice. The *Ambiguity Architect* breaks down leader behaviours and preferences into two streams – *Enablers*: those behaviours that help leaders proactively and positively (a total of 49 items), and *Restrainers*: those behaviours that can derail a leader's efforts to manage ambiguity effectively (a total of 16 items). See the Appendix for a complete list of items.

In this research, we wanted to explore whether gender (male/female) changed how executives perceived their capabilities to manage change and ambiguity. In addition, we wanted to see how much prior experience (or overall tenure) mattered, measured by years of Public Service experience, number of direct reports supervised, and executive level or rank.

We received 476 fully completed surveys, which served as baseline data for the statistical analysis. In addition, we also analyzed comments from the completed surveys and some of the additional 156 partially completed surveys. The inset on the following page describes the demographic data from the fully completed surveys. Most respondents (59.0%) were female executives, two-thirds (63.0%) had ten years or less of PS experience, more than three-quarters (76.4%) supervised ten direct reports or less, and a majority (79.0%) were at the EX-01 or EX-02 levels.

The co-authors prepared individual reports and sent them to each executive participant. In addition, APEX hosted an online professional development session with *Ambiguity Architect* author Dr. Randall P. White to help executives interpret and understand their results.

This paper presents the results of the data analysis and highlights the verbatim comments from this executive population. In addition, there are suggestions for further work to understand better



APEX

the gaps in dealing with uncertainty and change that Canadian federal PS executives need to address in the future.

Findings

Researchers calculated average mean scores as reported by respondents and generated lists of the top five enablers and restrainers. Generally, an executive should try to maximize scores on the enabler scale and minimize scores on the restrainer scale. Note that since organizational contexts and situations vary widely, there is not one ideal target score to achieve on either scale. Instead, the purpose of the Ambiguity Architect is to help make leaders more aware of their strengths, weaknesses and preferences and identify areas for development or improvement related to uncertainty and, perhaps, chaos.

In this study, based on responses from the PS executives, the five highest Enablers (captured on a scale of 1.00 (low) to 5.00 (high)) are *Flexibility*, *Simplifying/Essence detector*, *Creating*

HIGHEST ENABLERS

1. Flexibility:

Is open with others when (s)he does something wrong (4.01)
Admits mistakes (4.00)

2. Simplifying/Essence Detector:

Works to simplify complex explanations to straightforward ones (3.96)

3. Creating Excitement:

Is described as enthusiastic (3.88)

4. Risk Tolerant:

Will take a chance and make a decision (3.86)

excitement, and *Risk tolerant*.

Behavioural flexibility is a critical component in a successful leader's toolkit. Those executives who can adapt to changing contexts without compromising core values or desired results are also very good at making continuous or mid-course corrections while motivating others through solid communications, leading by example and transparency. Being able to admit mistakes and open to others when things go wrong at the right time are critical elements of

PROFILE OF RESPONDENTS

Survey responses received:

- 476 fully completed.
- 156 partially completed.

Gender:

- 41.00% male.
- 58.80% female.
- .20% other.

Years of PS experience:

- 15.60% less than 2 years.
- 27.20% 2-5 years.
- 20.10% 6-10 years.
- 37.10% 10+ years.

Number of direct reports:

- 41.10% less than 5.
- 35.30% 6-10.
- 8.10% 11-15.
- 15.50% 15+.

Executive level:

- 54.30% EX-01.
- 24.70% EX-02.
- 16.50% EX-03.
- 3.00% EX-04.
- 1.50% EX-05.



behavioural flexibility. However, a leader risks losing credibility or being seen as a poor decision-maker if overdone.

Effective executives are also able to communicate ideas simply yet wholly. When others are too mired in detail to see the bigger picture, leaders who understand a situation or problem can clarify the purpose and explain further information using simple language that all can understand. They can also outline and define a sequence of events to implement a decision so the team works together quickly and efficiently.

Executives who effectively manage ambiguity create excitement and energy at work for themselves and others. They do not do this randomly; it is a well-intentioned strategy to motivate and inspire a team to work through adversity, leading by example and having fun achieving results together. Enthusiastic leaders who care are at the heart of such efforts.

Risk-tolerant executives can make decisions with incomplete information and weigh situations' benefits and consequences effectively and on time. One of the essential qualities of such leaders is their ability to calibrate individual, team, and organizational risk and act.

The other side of the coin — the behaviours to be avoided — are called restrainers. The respondents in this study show that the top five restrainers come from four categories - *Fear of Conflict*, being *Tethered to the Past*, having *Trouble with Transitions*, and *Complex Communications*. (Please note that a low score—close to 1.00 —is the desired outcome on these items)

HIGHEST RESTRAINERS

1.Fear of Conflict:

Is seen as too accommodating (2.34)
Has trouble dealing with heated situations (2.03)

2.Tethered to the Past:

Is most comfortable dealing with familiar problems (2.04)

3.Trouble with Transitions:

Trouble transitioning (1.91)

4.Complex Communications:

Too much detail (1.73)

According to Kraaijenbrink (2018), one significant leadership characteristic in the 21st century executive's toolkit is the ability to embrace and manage conflict in the workplace. Cognitive conflict occurs daily, especially when people discuss priorities, processes, and procedures. Distinct from affective conflict, which is more personality-driven and negative, cognitive conflict, when managed well, is healthy to enable teams to align and achieve good results.

However, some people do not feel comfortable when there are differences of opinion, preferences, or roles. Leaders who react to such conflict by over-accommodating others risk losing credibility and positional authority – and potentially being seen as not having an opinion of their own.

While it is true that effective leaders should try to replicate successful practices to improve their chances of similar success, executives can also get into trouble if they overly rely on tried-and-tested ways of dealing with problems that worked in the past. Ignoring opportunities to innovate, to be more efficient and effective, limit learning and ultimately may hurt the organization's



performance, especially in demanding environments where citizens' expectations are high for quality programs and services.

Executives who have difficulty adapting to change, juggling multiple and competing priorities, and shifting focus as required often encounter significant setbacks when asked to drive a significant change project. Leaders who have trouble managing transitions and shifts in pace need to learn to focus less on restraining behaviours and more on the enablers.

Executives often get into trouble when they focus too much on small details – when they are too operational – without linking to the bigger picture. As a result, they may miss opportunities to communicate their vision and direct the work accordingly and effectively. Others expect leaders to situate work that matters most to them in the context of something bigger.

Does gender seem to matter?

A significant caveat to this research is that the data obtained from executives were self-reported. A more rigorous empirical study focusing on the causality of gender and the ability to manage ambiguity is required to draw firm conclusions. Nevertheless, researchers ran a series of t-tests to look for significant male/female gender differences.¹ A total of 12 items (ten enablers and two restrainers) were significant:

Enablers:

1. Drills Deep: Males higher than Females (alpha=.021)
2. Futurist: Males higher than Females (alpha=.043)
3. Scans Ahead: Males higher than Females (alpha=.015)
4. Motivated by Challenge: Females higher than Males (alpha=.003)
5. Enthusiastic: Females higher than Males (alpha=.006)
6. Flexible: Males higher than Females (alpha=.046)
7. Essence Detector: Males higher than Females (alpha=.008)
8. Interpreter: Males higher than Females (alpha=.000)
9. Simplifying: Males higher than Females (alpha=.003)
10. Focus: Males higher than Females (alpha=.031)

Restrainers:

1. Not Motivated by Work: Males higher than Females (alpha=.001)
2. Tethered to the Past: Males higher than Females (alpha=.037)

Regarding enabler variables, males self-reported higher scores in scanning ahead, seeing into the future, drilling deep and detecting the essence of ambiguous situations. Future scanners exhibit two critical abilities - gazing into the future to see the possibilities of an idea or potential solution and drilling deep enough to ask the right questions at the right time when they lack the technical knowledge. The male respondents in this survey also

scored themselves higher than their female counterparts in their ability to focus, interpret, and simplify complexity. These enablers typically help executives stay on point, eliminate distractions and use time effectively. On the other hand, compared to male executives, female executives appeared to report more enthusiasm and motivated by the challenges that uncertainty breeds. Exciters can create energy and spontaneity in the workplace by making work fun and allowing employees to contribute and innovate without judgment.

¹ Independent t-test to seek a two-tailed p-value alpha of .050 or less.



APEX

Two statistically significant restrainers emerged from the self-reported data. Male executives self-reported more difficulty than female executives in being motivated by work. It is easier for a team to be engaged and energetic if the leader responsible for their work seems to enjoy what they are doing or appears optimistic about the future. The other statistically significant restrainer showed that male executives seemed overly tethered to the past compared to female executives. More reliance on past patterns and practices can inhibit innovation and adaptation and lead to repeated mistakes.

However, because of the self-report nature of the survey, there may be an inherent bias in the data if females are naturally more reluctant, more humble, to take credit for things or to call attention to their strengths than males. Women may underestimate their strengths and abilities to manage uncertainty in the workplace, and men may be likelier to be less innovative and experimental when faced with ambiguity if they overly rely on established ways of doing things.

In their pivotal 3-year study of female executives, Morrison, White, and Van Velsor (1987, 1994) identified several factors that can determine success or derailment in the corporate environment, how the executive climate is different for women, and the obstacles females face in breaking the glass ceiling on the road to the top. Nearly 30 years later, a key question remains: Do female executives still need to appear more eager, energetic, and motivated than their male counterparts to deal effectively with ambiguity in the workplace?

According to the current data, while there appear to be gender differences in a fraction of the survey items, we still do not know if the glass ceiling still exists. However, when we reference the executive population of the federal Public Service, while there are more females (56%) than males (44%) at the EX-01 level, there are fewer females (43%) than males (57%) at the EX-05 level.² More empirical research is required to shine a better light on gender differences under conditions of uncertainty and ambiguity.

“As a spouse, a mother, and primary care provider for a set of aging parents, I find it very difficult to juggle priorities and to manage my work as an executive effectively in this turbulent environment”.

- Respondent

Does experience matter?

To shed light on whether experience matters, we examined years of Public Service, the number of direct reports supervised, and the rank/level of the executive.³

² Executive population of the federal Public Service data as of March 31, 2022.

³ One-way ANOVA and F-test to identify significant differences between groups with p-value (alpha) = .050 or less. In addition, when the F-test revealed a significant difference between some of the tested groups, Tukey Honest Significant Difference (HSD) Post-Hocs were used to assess the significance of differences between pairs of group means.



APEX

1. Years of experience

It is logical to assume that the more years of executive experience an executive has, the more situations and problems they have faced, the more they have applied their leadership and management skills, and the more tools they have acquired to manage ambiguity. In this study, two enablers related to years of public service were statistically significant – the abilities to drill

“One of my best strengths as a leader is to break down complex concepts into digestible pieces, and to explain very specifically by whom and why”.

- Respondent

deep and clarify complex issues. According to the self-report data, executives with more than ten years of service were statistically likelier to exhibit critical enabler skills (*Drill Deep and Clarifier*) than executives with 2 to 5 years of service. We do not know from survey results what may explain this difference nor if there is an interactive effect between years of service

and gender, the span of control and executive level.

2. Number of direct reports supervised

Generally, the number of direct reports managed by an executive increase with the size and scope of their function, the complexity of tasks, the span of control and the number of employees working in that part of the organization. Supervising a small team of employees, for most, is the first taste of management that requires essential skills such as establishing priorities and timelines, monitoring, and providing feedback on work completed, and further developing the skills of team members. Additional direct reports broaden a manager's span of control, and he must make adjustments to help organize and lead other supervisors.

Four enablers – *Risk Tolerance, Drill Deep, Futurist, and Scan Ahead* – were significant with respect to the number of direct reports supervised. According to the data, those executives supervising between 6-10 and more than 15 direct reports self-report being more risk tolerant compared to executives supervising less than 5 direct reports. Perhaps as the number of direct reports increases, an executive is better able forecast upcoming issues before they occur thereby reducing the fear of being off guard. More direct reports may also give the executive reassurance that there is enough supervision in the ranks to make sure that tasks will be completed and reduce the risk of incompleteness or failure.

“Personally, I think that I have too many direct reports ... I spend a lot of time putting out HR fires and smoothing out operational things, and I have little time now to connect the dots and to think strategically where I think I can add the most value”.

- Respondent

Similar results occurred for *Scanning ahead, Futurist-oriented, and Drilling deep* into issues. Large numbers of direct reports may include a broader mix of roles and division of labour that an executive can delegate. More people at the table means a more comprehensive perspective that can help scan the environment for opportunities and threats. It may also mean that greater detail and attention are visible up the chain of command, allowing functional leaders to drill deeper into issues. However, more empirical research is required to predict whether increased responsibilities are a difficult adjustment for some executives to make depending on context.



3. Executive level

Executive level or rank may be another critical determinant of experience. Senior leaders tend to develop skills for managing ambiguity and uncertainty, such as communication, team, and leadership skills. The more senior the leader, the more likely they will have to rely on information supplied by others, which may be partial or incomplete, and where the potential solution is not apparent.

In his seminal study, Jeffrey Pfeffer (1977) was one of the first to document the constraints on leader behaviours. He described a complex social system where executives face expectations from various stakeholders for appropriate behaviour, conformity to rules, procedures and processes, upholding values and ethical principles, and generating expected results. Surprisingly he also found that even high-level executives have less unilateral control over fewer resources and policies than most assume due to approval processes, reporting relationships, and span of control issues.

“Many people don’t know it but it is actually very lonely and stressful being a senior executive .. we are meant to drive results .. we do not show weakness .. and we do not often confide in others about our worries and concerns”.

- Respondent

In this study, all enablers were statistically significant concerning the executive level or rank. Executives from the EX-05 group were statistically different compared to all other executive ranks below them in *Risk tolerance, Drilling deep, Scanning ahead, Essence-detecting, Clarifying, Interpreting, and Simplifying data*.

These EX-05 and other senior leaders may solve problems and make decisions based on available data, even if that is only part of the picture. They may have learned through progressive experiences to better adapt to change and cope with uncertainty and risk. They may have also mastered the art and science of managing large numbers of staff, issues and resource constraints and smoothing out complex problems.

“I am a mid-level executive and find it very difficult to translate direction from senior management into actionable pieces for my teams to execute when things seem in crisis and disarray”.

- Respondent

However, there are two sides to this inference. First, we can admire the skills of senior executives and ask, "How do we replicate the knowledge, experience, and know-how of such leaders in younger cohorts of executives?" Typical efforts to develop leaders include progressive learning and talent management tools such as executive training, mentoring, coaching, stretch assignments, and interchange assignments.



APEX

Second, the lower self-reported scores for more junior executive levels in this study may reflect a negative tendency – that in this context executives at these levels are effective at managing up, do not speak truth to power, and prefer to work in a culture of compliance rather than disruption. The enormous pressures to manage workload, stakeholder expectations, and personal health and well-being may also indicate a lack of self-confidence or self-efficacy. One of Canada’s most noted industrial psychologists, Albert Bandura (1977, 1986, 1997) described self-efficacy as an individual’s belief in his or her capacity to make a difference and execute behaviors necessary to produce specific performance results. Self-efficacy is “highly relevant to the success of executives as it reflects confidence in their ability to exert control over one’s own motivation, behavior, and social environment”.⁷

“I am tired of all the changes amidst directives on how we need to act from accommodation to inclusion to flexible work weeks. Can someone just tell me what I need to do and let me do my work?”
- Respondent

More empirical research focusing on the self-efficacy of Public Service executives across gender, levels, spans of control and years of service would help identify areas of concern and potential solutions to apply in different contexts. For example, exhausted executives who respect the chain of command may prefer to manage upward out of convenience or desperation.

Discussion

This study has explored whether gender may affect Public Service executives' self-perceived capacity to manage uncertainty and ambiguity. In addition, the research examined the impact of three experience-related variables - executive level, number of direct reports, and years of service - on the self-reported abilities of executives to manage ambiguity.

While the data demonstrated some interesting relationships between the variables, there are certain limitations when using self-report data. For example, one disadvantage of self-report studies is a need for more control over how respondents generally behave. Respondents may exaggerate self-reported answers and be affected by biases such as social desirability and rater fatigue.

To further explore whether executive experience and gender make a difference, what types of empirical research do we need to generate empirical evidence to help executives better manage uncertainty and ambiguity?

One critical component is understanding the environment and organizational context. Generally, more dynamic and unstable environments characterized by quick turnarounds and operating at a fast pace require more vertical structure, fewer direct reports, and a narrower span of control. For example, suppose you are running a government policy shop or an intelligence-gathering function, where the complexity of the work could change daily. In that case, it may be more effective to have a smaller span of control to ensure employees understand their role and receive the feedback and resources needed to get the work done promptly and effectively.



APEX

In contrast, if the work occurs in a predictable and stable environment, a Public Service executive can benefit by expanding the number of direct reports, flattening the organizational structure, and striving for efficiency and effectiveness. For example, if you run a call centre using relatively standard routines and processes, you may have as many as 30 people directly reporting to you.

However, Public Service executives often need help adapting stable organizational structures and reporting relationships to match the strategic objectives and obtain desired results. Compared to more fluid environments, the typical corporate design in the Public Service often prevents the easy deployment and redeployment of the best talent from tackling emerging issues and driving innovation and change. Uncertainty and ambiguity often arise when these gaps exist.

A second component is related to teaching executives to work in different situations with competing priorities. Newer employees will require significantly more training and supervision in procedures and processes than employees with longer tenure. The challenge for an executive is knowing how and when to alter the span of control to leverage the best use of available talent to maximize desired results. This challenge expands in ambiguous environments when facing multiple priorities, low tolerance for mistakes, financial constraints, time pressures, political influence, and public expectations, all of which can cause complex decision-making.

While researchers at Harvard Business School (2022) are identifying how executives can best react to situations with constant, unpredictable change, such as VUCA (volatility, uncertainty, complexity, and ambiguity), there is a need to explore the types of ambiguity facing Public Service executives. Different skill sets and kinds of leaders may function better in specific ambiguous contexts, i.e., during discrete, short-term crises, periods of sustained uncertainty, and organizational changes characterized by a series of longer discontinuous transitions and disruptions.

A third component is finding better talent management assessment and succession planning tools. Success breeds success: employees and managers who are deemed successful tend to move into more challenging roles with greater responsibilities. However, there is no guarantee that what an executive did well in one position will also work in another. For example, even experienced executives may need help managing those under their span of control, functioning effectively with superiors and peers, and understanding the organizational culture and the way things get done.

This checklist may help you reflect on your abilities and identify any gaps:

- As an executive, are you open to consistently learning, being comfortable with a lack of clarity, and being the beacon of light for your team, even if unsure?
- Mentally, can you adopt a positive mindset that places ambiguity at the heart of the opportunity to act without fear of failure and embrace the unknown?
- Can you develop task-specific confidence by achieving quick wins in ambiguous situations and building momentum with your team?



APEX

- Do you have the capacity to welcome adversity and challenge the status quo, be bold in handling conflict, make difficult decisions without complete information, and communicate effectively?
- Do you seek trusted guidance from mentors and other guides when you have trouble finding your North Star?
- Can you demonstrate the leadership skills and abilities needed to shape your organization's culture, even if it means being unpopular?
- Can you balance the need to serve the public while caring for yourself, including your relationships with those you report to, those you direct, and your colleagues?

“Uncertainty and ambiguity can lead an executive to be doubtful, skeptical, suspicious, and mistrusting about someone or something. Not dealing well with ambiguity can be detrimental to me as an executive, to colleagues and employees, and ultimately cause lost opportunities to achieve results”.

- Respondent



APEX

APPENDIX 1.

AMBIGUITY ARCHITECT ENABLERS (49 items)

- **Motivated by mystery:**
 1. Is attracted to projects and problems with an element of the unknown in them.
 2. Likes to work on problems that have no obvious solution.
 3. Looks for a better solution even when there is a known one that has worked before.
- **Risk tolerant:**
 4. Will take a chance and make a decision.
 5. Can decide without having full information available.
 6. Takes risks in order to increase experience.
 7. Shifts gears easily.
 8. Will make a decision based on gut instinct.
- **Scanning ahead (Drills Deep):**
 9. Asks penetrating questions.
 10. Is always curious.
 11. Is interested in unusual facts and trends that may mean something for the future.
- **Scanning ahead (Futurist):**
 12. Has made a number of fairly accurate predictions about the future.
 13. Is good at spinning (imagining/creating) future scenarios.
 14. Is on the lookout for even the faintest signs of what the future may bring.
- **Tackling tough issues (Motivated by Challenge):**
 15. Really goes looking for challenging assignments.
 16. Is energized by difficult problems.
 17. Gets energy from his/her work.
 18. Is described as tenacious in pursuing objectives.
- **Tackling tough issues (Tenacious):**
 19. Links to new opportunities to current objectives.
 20. Likes to know how things work.
 21. Can pick up a trail and follow it.
- **Creating Excitement (Enthusiastic):**
 22. Is described as enthusiastic.
 23. Injects enthusiasm into the workplace.
 24. Can be spontaneous at work.
- **Creating Excitement (Invigorating):**
 25. Is described as making work fun for others.
 26. Looks for ways to make even the tedious parts of the job exciting.
 27. Creates an environment others love to work in.
- **Flexibility (Flexible):**
 28. Is described as a balanced person.
 29. Is flexible when facing tough decisions.
 30. Is open with others when he/she does something wrong.
 31. Admits mistakes.
- **Flexibility (Sells Change):**
 32. Can hammer out an agreement among warring or disgruntled parties.
 33. Patiently brings around people who resist change and want things to be as they are.
 34. Will take the time to sell others on what needs to be done.
 35. Listens carefully to those who are confused and upset by change.
- **Simplifying (Essence Detector):**
 36. Works to simplify complex explanations to straightforward ones.
 37. Creates one-line explanations that others find useful.
 38. Can capture business strategy in a single sentence, image, or slogan.
 39. Is agile in communicating the core of an issue to others.
- **Simplifying (Clarifier):**
 40. Is a clear communicator.
 41. Strives to provide clear, simple explanations versus complex ones.
 42. Gets asked to explain complicated things.
- **Simplifying (Interpreter):**
 43. Can create vivid symbols, metaphors or images that communicate ideas to others.
 44. Can explain complex subjects simply enough for children to understand.
 45. Can explain complex topics in ways others can understand/comprehend.
- **Focus:**
 46. Knows what are the most important things to do.
 47. Rechecks priorities periodically.
 48. Keeps an eye on a few specific objectives, no matter what else may be going on.
 49. Treats time as something to be invested wisely on a few key priorities.



APEX

APPENDIX 2.

AMBIGUITY ARCHITECT RESTRAINERS (16 items)

- **Trouble with transitions:**
 1. Has trouble transitioning from one problem/project to another.
 2. Has trouble shifting modes of behaviour, e.g., from firm to soft.
- **Not motivated by work:**
 3. Throws a wet blanket over work, e.g., dampens enthusiasm of others.
 4. Appears bored with work.
- **Conflict-averse:**
 5. Has trouble dealing with heated solutions.
 6. Is seen as too accommodating.
- **Muddy thinker:**
 7. Often confuses others with lack of clarity.
 8. Muddies/confuses complex issues further.
- **Complexifier:**
 9. Doesn't break down complex topics into a logical order for discussion.
 10. Finds it hard to explain complex subject matter to someone not in the field/area.
- **Detail-driven:**
 11. Focuses on the small matters and misses the key issues in a problem.
 12. Goes into too much detail on complex issues.
- **Narrow:**
 13. Appears professionally narrow to others.
 14. Sees things overwhelmingly in the present tense.
- **Tethered to the past:**
 15. Is most comfortable dealing with familiar problems.
 16. Prefers to repeat past actions.



APEX

References

Denison, Daniel R., Robert Hooijberg, and Robert E. Quinn (1995). "Paradox and performance: Toward a theory of behavioural complexity in managerial leadership. *Organization Science*. Vol 6, pp. 524-540.

Fortune/Deloitte CEO Survey. (2022, September 6). Deloitte United States. Retrieved October 1, 2022, from <https://www2.deloitte.com/us/en/pages/chief-executive-officer/articles/ceo-survey.html>

Hodgson, Philip and Randall White (2001). *Relax: It's Only Uncertainty*. London: Prentice-Hall/Financial Times.

Kraaijenbrink, J. (2018, December 19). What Does VUCA Really Mean? Forbes. Retrieved October 1, 2022, from <https://www.forbes.com/sites/jeroenkraaijenbrink/2018/12/19/what-does-vuca-really-mean/?sh=3a82bf7417d6>

Managing When the Future Is Unclear. (2019, April 26). Harvard Business Review. Retrieved October 9, 2022, from <https://hbr.org/2019/01/managing-when-the-future-is-unclear>

Morrison, Ann M., Randall P. White, and Ellen Van Velsor. (1994). *Breaking The Glass Ceiling: Can Women Reach the Top of America's Largest Corporations?* New York: Basic Books.

Salancik, Jeffrey. (1977). The Ambiguity of Leadership. *Academy of Management Review*, January 1977, pp. 104-112.

White, Randall. Uncertainty: Learning's Final Frontier. *Chief Learning Officer*, April 2019, Vol 18, No 3.

Van der Hoek, Marieke. (2021). "Matching leadership to circumstances? A vignette study of leadership behaviour adaptation in an ambiguous context". *International Public Management Journal*. Vol 24, No 3, pp. 394-417.

What VUCA Really Means for You. (2022, August 31). Harvard Business Review. Retrieved October 1, 2022, from <https://hbr.org/2014/01/what-vuca-really-means-for-you>



APEX

Endnotes

¹ Fortune/Deloitte CEO Survey. (2022, September 6). Deloitte United States. Retrieved October 1, 2022, from <https://www2.deloitte.com/us/en/pages/chief-executive-officer/articles/ceo-survey.html>

² Lai, L. (2019, January 9). *Managing When the Future Is Unclear*. Harvard Business Review Online. <https://hbr.org/2019/01/managing-when-the-future-is-unclear>

³ Hodgson, Philip and Randall White (2001). *Relax: It's Only Uncertainty*. London: Prentice-Hall/Financial Times.

⁴Denison, Daniel R., Robert Hooijberg, and Robert E. Quinn (1995). "Paradox and performance: Toward a theory of behavioural complexity in managerial leadership. *Organization Science*. Vol 6, pp. 524-540.

⁵ Van der Hoek, Marieke. (2021). "Matching leadership to circumstances? A vignette study of leadership behaviour adaptation in an ambiguous context". *International Public Management Journal*. Vol 24, No 3, pp. 394-417.

⁶ Executive Work and Health Survey. Association of Professional Executives of the Public Service of Canada (APEX), November 2021.

⁷ Bandura, Albert. (1977, 1986, 1997). *Self-efficacy: Toward a unifying theory of behavioral change*. *Psychological Review*, 84(2), 191-215.