The OODA loop can help your organization to become more adaptable

By Marcus Coetzee, 20 September 2021

https://www.marcuscoetzee.co.za/

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1. Introduction

The OODA loop is a mental model that can help organizations to adapt to changes in our environment. It explains how we observe our surroundings, orient ourselves, make appropriate decisions and act accordingly.

This model is especially useful for leaders who want their organizations to thrive in our interconnected world where unforeseen events appear rapidly on the horizon. Recent events, including the Covid pandemic and riots, have caused devastation in South Africa. These events impacted our organizations and our lives. The future is unpredictable and has more surprises in store for us.

I have closely observed which organizations have been able to adapt to shifts in their environment versus those that have floundered. Those that successfully adapted were able to cycle effectively through their OODA loops.

This article explains the OODA loop and shares tactics that organizations can use to become better at defending against threats and unlocking opportunities that emerge through changes and shifts in our environment.

This article is a long read of approximately one hour for the average reader. I wrote it intermittently over the span of a year and a half during South Africa's 'lockdown' due to the pandemic. The examples I cite will reflect my work in the field of socio-economic development, as well as my interest in history and military science, which is where I came upon the OODA loop. Nevertheless, the insights will also apply to leaders of all organizations.

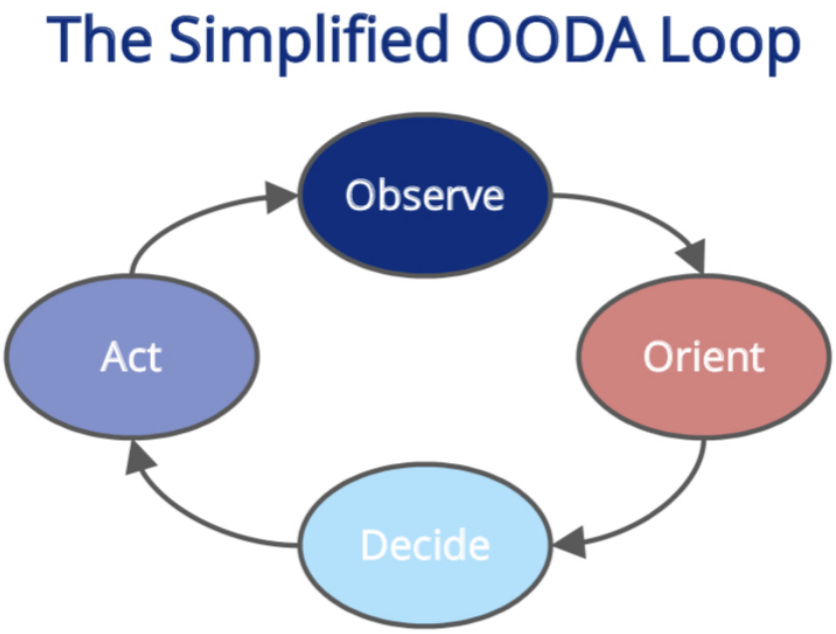
2. The OODA Loop is a mental model with four cyclical stages

The OODA loop is a mental model developed by Colonel John Boyd in 1961. He was a fighter pilot, a flight instructor, and a consultant to the Pentagon. The model revolutionized aerial tactics and how armed forces engaged with enemy forces in aerial and ground combat. It frequently forms part of military doctrine.

This model has since moved beyond its military origins and been adopted by leaders and strategists in businesses, governments, and non-profit organizations. Numerous books have been written about it. A Google search produces 345,000 results on the topic. The model has even been taught to entrepreneurs and software developers.

The OODA loop contains ideas from the fields of sense-making, situational awareness, problem solving, decision-making, game-playing, and action-learning.

Below is the basic OODA loop:



There are four stages to the OODA cycle:

- Stage 1 = **Observe** what is going on and the direction things are heading.
- Stage 2 = **Orient** oneself through gaining perspective and making sense of these observations.
- Stage 3 = **Decide** what to do based upon the specific situation.
- Stage 4 = **Act** accordingly.

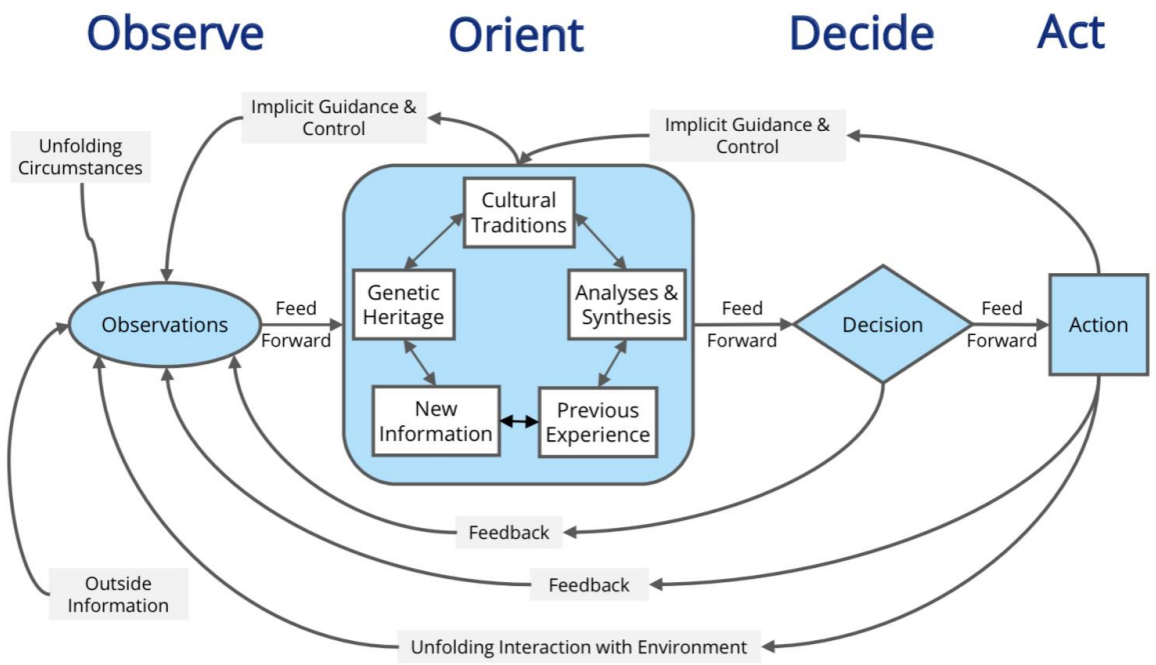
For example, let us consider the case of Steps Clubfoot Care in April 2020 when South Africa entered a strict lockdown due to the Coronavirus pandemic, which severely constrained the ability of organizations to operate:

- It clearly **observed** how the lockdown rules constrained its functioning, the needs of its patients and many other factors that had come into play.
- Then it **oriented** itself by understanding these constraints and identifying its priorities (i.e. children who were wearing clubfoot bracers or who had their feet in casts) and options for supporting them.
- Then it made **decisions** based on these observations, including to register as an 'essential services provider' to enable it to operate during lockdown, and to establish a fund to help unemployed mothers to pay for their travel costs so that they could travel to the clinics with their children.

- Finally, it **acted** rapidly to implement these and other decisions so that the children did not miss their scheduled treatment and all mothers were kept informed.

Our OODA loops are perpetually cycling through these four stages. Our actions always yield additional observations thereby beginning another cycle.

Furthermore, it is possible to exit each stage and return to gather more observations. This feedback system is described in the advanced depiction of the OODA loop below:



We tend to be stronger with certain stages of the OODA loop than others. For example, some people might be more comfortable and skilled with observing and orientating, while others might be better at making decisions and taking action.

There are also OODA loops within OODA loops. For example, a leadership team will be operating its own collective OODA loop in response to a crisis, and each member will have their own OODA loop to work through.

OODA loops can cycle concurrently. For example, a CEO might have one OODA loop for how to exploit a potential opportunity for their organization, and another OODA loop for dealing with a pressing operational problem.

Successful organizations are always generating new OODA loops to help them deal with new challenges as they emerge.

Despite the multitude of OODA loops that we have cycling through at any moment, this mental model is most useful when we need an explicit framework to urgently respond to an ambiguous and high-pressure situation. As a rule, the speed and quality of our OODA loops determines how well we adapt to a crisis, opportunity, or competitive situation.

3. The OODA loop can improve our ability to adapt to changing circumstances

We should train our ability to think clearly about complex and wicked problems in order to understand and overcome them. One valuable tool is inductive and deductive reasoning; another is the OODA loop.

The world is becoming more complex because of globalization, which is associated with the increased interconnectedness and interdependence of organizations. Here is what General Stanley McChrystal said in his book Team of Teams: New Rules of Engagement for a Complex World (2015):

> *"Today's rapidly changing world, marked by increased speed and dense interdependencies, means that organizations everywhere are now facing dizzying challenges, from global terrorism to health epidemics to supply chain disruption to game-changing technologies. These issues can be solved only by creating sustained organizational adaptability..."*

Furthermore, technology is accelerating the pace of change. Kevin Kelly, the founding editor of Wired Magazine, and author of the book The Inevitable: Understanding the 12 Technological Forces that will Shape Our Future (2017) wrote that:

> *"We don't need to be blind to this continuous process. The rate of change in recent times has been unprecedented, which caught us off guard. But now we know: We are, and will remain, perpetual newbies. We need to believe in improbable things more often. Everything is in flux, and the new forms will be an uncomfortable remix of the old. With effort and imagination we can learn to discern what's ahead more clearly, without blinders."*

The trends caused by globalization and technology are likely to yield an increasing number of unexpected events, which will present our organizations with both threats and opportunities and a general need to become good at adapting.

Organizations that can make sense of what is going on around them, and that are able to act upon this knowledge, are more likely to adapt to their changing circumstances, and thrive accordingly. In contrast, those that fail to do so will suffer losses, downsize and eventually close their doors. This is the natural evolution of organizations. This assertion was echoed by Michael Reeves and Mike Deimler of the Boston Consulting Group in Adaptability: The New Competitive Advantage (2011):

> *"Those [organizations] that thrive are quick to read and act on signals of change. They have worked out how to experiment rapidly, frequently, and economically - not only with productions and services, but also with business models, processes, and strategies. They have built up skills in managing complex multi-stakeholder systems in an increasingly interconnected world. Perhaps most important, they have learned to unlock their greatest resources - the people who work for them."*

The OODA loop gives us a framework for making sense of what is going on around us and acting accordingly, especially if there is a crisis where everyone is overwhelmed, and when there is a shortage of information combined with a need for urgent action. This will help our organizations and ourselves to adapt more effectively to our ever-changing environment. I believe that we should practice thinking in the stages of the OODA loop until it becomes second nature and ingrained in our thinking. I use the OODA loop extensively in my work and personal life. Sometimes I even discover that I used it unconsciously.

4. Tactics to enhance the four stages in the OODA loop

This section contains a high-level overview of the four stages in the OODA loop - i.e. observe, orient, decide and act.

I have also used this framework to propose some tactics that I believe will be useful to leaders who want to improve their organization's ability to read and react to its changing environment. The suitability of these tactics will depend on the context where you want to apply your OODA loop. Furthermore, these tactics were not in the original formulation of the OODA loop by John Boyd, but rather how I interpret it and believe it can be used by the organizations that I work with.

The OODA loop remains as relevant today as when it was developed in the 1960s. For example, in the Harvard Business Review in 2011, Michael Reeves and Mike Deimler wrote:

> *"In order to adapt, a company must have its antennae tuned to signals of change from the external environment, decode them, and quickly act to refine or reinvent its business model and even reshape the information landscape of its industry."*

Stage 1 of the OODA loop: Observe what is going on

The first stage in the OODA loop is to clearly observe what is going on inside and around your organization, or for the matter that triggered your need for the OODA loop.

The need to gather information and gain perspective on matters is both common sense and human instinct. For example:

- When you are lost in the wilderness you climb a tree or a hill to see where you are in relation to where you want to go.
- Even on the battlefield, generals have always tried to get perspective through observing things around them. Far back in 1794, the French army used scouts in hot air balloons to observe enemy forces from above and help win the Battle of Fleurus.

- And when we travel in our vehicles, we frequently use the Global Positioning System (GPS) to navigate, which relies on using satellites in orbit above the earth to triangulate our location.

I have identified three key tactics that leaders can use to improve their ability to observe important events, shifts and trends that may impact their organizations.

A. Adopt multiple perspectives when observing

Consultants and business schools use and teach several models that help structure our perspectives for observing what is happening inside and around an organization. Some well-known examples include: SWOT Analysis, PEST Analysis, Porter's Five Forces Analysis, various Total Quality Management models, and McKinsey 7-S Framework.

These models are effective when used appropriately. In my consulting work, I tend to use my own variation of the Balanced Scorecard where I adopt:

- an **impact perspective** where we focus on our beneficiaries and our impact upon them
- a **market perspective** were we look at things like our competitors, customers, donors and investors and how we have positioned ourselves
- **a financial perspective** where we look at our financial structure and results
- a **capability perspective** where we explore the structure, culture and abilities of our organization.

B. Be sure to look both within and outside of your organization, and into the future

Try not to get sucked into the 'engine room' of your organization, but at the same time, don't spend too much time observing what is happening outside of your organization. The same principle applies to being unduly preoccupied with the past or present. Strive to maintain a delicate balance in your observations.

I recall an interview on Harvard Business Review's podcast. The director of a top strategy consulting firm suggested that leaders need to allocate about 10-20% of their time to observe and make sense of what is happening outside and in the future of their organizations. He went on to say how this would help them to understand the 'big picture' and prevent blind spots in their vision.

In contrast, most of the leaders that I have worked with, are more comfortable observing the present details of what is happening within their organization, and when they're stressed, this tendency seems to be accentuated. I have witnessed how some leaders will fixate on a report or policy or piece of technology, and in doing so, neglect everything else. I suspect this gives

them a sense of control amidst a crisis, as they revert to the tasks that they have mastery over, rather than attending to the matter at hand. I have often explained the metaphor of the Titanic - if the leaders spend too much time in the 'engine room', then there is no captain on the bridge to look out for dangerous icebergs on the horizon that might sink their ship.

In contrast, some leaders tend to focus on principles and patterns and the direction the industry is heading. I confess that I am very poor with detail and processes - when I look at these too closely, I sometimes feel overwhelmed and dizzy. I am also more inclined to look upon an organization from 'above' and observe it in its context. This creates vulnerabilities and blind spots where I have missed out on important information, and I have made some poor decisions because of it.

Since different people have different preferences for what they observe, it seems logical that a team of observers would be more effective than a lone observer. I have frequently observed that successful leaders who are skilled at engaging with what is happening outside and in the future of their organizations, will tend to have operationally-minded partners to mitigate their blind spots.

C. Use dashboards to filter the information that your organization needs to understand what is going on, and to reduce levels of information overwhelm

Many leaders may be overwhelmed by sheer abundance of information on what is happening inside and outside of their organization. Furthermore, it is not always clear what information is useful and trustworthy.

Dashboards can be a useful tool for observing quantitative data. For example, every day for the past year I have checked the Western Cape Government's Coronavirus Dashboard. I am also enamored by the dashboard and app that Abalobi developed. They are a social enterprise that uses technology to support subsistence fishermen and connect them with markets. Their technology monitors in real-time every aspect of their operation, including the marketplace they have created to help subsistence fishermen to connect directly with customers, the types of fish that are being caught, and income accruing to these fishermen.

These dashboards should contain a mix of lead indicators that suggest what is likely to happen and lag indicators that tell us what has happened.

Dashboards might also contain a mix of normal indicators and composite indicators - the latter are calculated from other indicators and represent patterns or relationships in the data.

Having used or helped to develop several dashboards over the years, it has become very apparent that the bulk of the time and effort to develop a dashboard, takes place on the backend as opposed to the pretty front-end. This requires leaders to be clear headed about the information they need. It also requires data analysts to gather, clean and prepare the data.

Furthermore, it is much more important to have a regular and productive discussion about the contents of the dashboard than to invest millions in a beautifully-designed dashboard that no one ever uses. Sadly, I have seen the latter happen too often.

Stage 2 of the OODA loop: Orient and make sense of things

The orientation stage is the second stage of the OODA loop and arguably the most important. I will therefore give disproportionate attention to it.

When we orient ourselves, we make sense of the information we have observed and update our mental maps accordingly. We ask ourselves what the information means. It is how we learn. It influences the decisions we make and ultimately how we act.

The ability of organizations to orient themselves effectively is a necessity in this rapidly changing world of ours. For example, Deborah Ancona wrote the following in the Handbook for Teaching Leadership: Knowing, Doing and Being (2011):

> *"In a world that is growing "smaller" but ever more complex, where unpredictable events and shifting political, economic, environmental, and social conditions challenge us at every turn, we all need to make better sense of what is going on. We should all explore the wider system, create maps that are plausible representations of what is happening, and act in the system to improve our understanding of reality. We will never capture it all, and never know how close we are. The best we can do is to make sensemaking a core individual, team, and organizational capability so that we can break through our fears of the unknown and lead in the face of complexity and uncertainty."*

However, it is surprisingly difficult to orient ourselves and our organizations when we are faced with either too little, ambiguous or overwhelming information.

It is also significantly harder to orient ourselves when we are stressed. Some of us may be inclined to freeze up and resemble a 'deer in the headlights'. There are admittedly some circumstances when it is wise to 'lie low' and be unnoticed, such as when a dangerous gang is prowling around. But for the most part, our organizations need to understand how the status quo is being disrupted and make sense of any approaching opportunities or threats. This enables us to make some good decisions and take appropriate action.

Here are six tactics or principles that leaders and organizations should consider when seeking to orient themselves.

A. Manage the emotional state of your organization and prevent people from becoming too stressed

The Threat-Rigidity Thesis was formulated in 1981 by researchers at Cornell University. It identified the natural tendency for organizations to become rigid in their thinking when stressed as a result of crisis. This impairs their ability to orient themselves.

This effect of stress is obvious at an individual level. For example, I read that survivors in the World Trade Centre on 9/11 waited an average of 8 minutes after the planes hit the towers before they decided to head down the stairs to safety. The survivors in the building were faced with an abundance of ambiguous information that didn't fit their mental models, and they struggled to make sense of it. They were stuck in 'analysis paralysis'. While researching this article, I ran across similar stories of passengers refusing to unbuckle their seats and leave burning airplanes.

The Threat-Rigidity Thesis explained how stressed organizations are likely to experience 'systemic breakdowns' whereby multiple things start to go wrong. It also said that stress tended to polarize organizations into two groups - those that were likely to survive and get stronger versus those that were likely to become weaker and perhaps even die. According to the authors of the Threat-Rigidity Effects in Organizational Behaviour: A Multilevel Analysis (1981):

> *"Although threat-rigidity effects are not always dysfunctional, many systemic breakdowns do appear to fit a threat-rigidity cycle. In the sense, threat-rigidity effects may be a two-edged mechanism in which both the survival and extinction potentials of organizations are amplified."*

The Threat-Rigidity Thesis also touches on other consequences of stress on organizations. There is the tendency of organizations to revert to their dogma - rigidly held beliefs and precepts - when trying to explain their observations. Furthermore, power and influence tends to move upwards in organizations and become concentrated at the top. This was because some leaders are able to use stressful situations to wrestle more control and resources out of the hands of their subordinates, and because their stressed subordinates are more inclined to look for guidance from the top. Predictably, these behaviours can impede an organization's ability to adapt, especially when decentralized decisions and actions are required.

To combat the tendency to become rigid in our thinking while stressed, leaders and their organizations must learn to 'keep their head' under pressure. The most effective method for achieving this is for leaders to set an example, be self-aware and able to manage their own emotional states. It also requires organizations to have trusted systems and protocols in place to guide people when their sense-making faculties and judgement are impaired.

Finally, it requires a level of practice and rehearsal since human beings are extremely adaptable, and capable of learning to function effectively in abnormal and high-pressure situations. I remember when I was trained as a paramedic in 1991, and how we frequently

rehearsed situations that we might encounter once we graduated. We also acclimatized to stressful situations by working in casualty departments of local hospitals, including during an acute outbreak of gang violence in the troubled Johannesburg suburb of Hillbrow. But for most organizations, rehearsal can simply mean thinking through possible scenarios, developing contingency plans, and learning how to deal with all manner of less-stressful situations while remaining composed.

B. Apply the Stockdale Paradox and confront the brutal truth (i.e. be realistic) and come to terms with the unpleasant facts that are confronting your organization

General James Stockdale survived seven and a half years as a prisoner of war in Vietnam in the 1960s. He was tortured regularly. During this traumatic time, he noticed that the optimists, who hoped that they would be released by a certain date, would be more likely to give up and die than their fellow prisoners.

Sometime after he was released, Stockdale was interviewed by Jim Collins for 'Good to Great' – a well-known business book. When asked about his time in prison, Stockdale replied with this profound answer:

> *"This is a very important lesson. You must never confuse faith that you will prevail in the end – which you can never afford to lose – with the discipline to confront the most brutal facts of your current reality, whatever they might be."*

This now famous Stockdale Paradox highlights the paradoxical role of leaders to be realistic and confront the brutal truth but never give up hope. On the one hand, they must help their organizations to clearly see and accept the truth of what is happening - the current state of things and the direction the future is taking. They must accept this truth both intellectually and emotionally. This will require them to overcome cognitive biases such as normalcy bias, planning fallacy and optimism bias which all present a more favourable view of the future than is likely to occur. Leaders must learn how to create a climate where such conversations are possible.

But leaders must also help their organizations to find hope, which consists of three important ingredients. First they must develop an achievable vision of what the future could look like. Secondly, they must identify and communicate a path for how this can be achieved. Third, they must cultivate a sense of agency – that there are things that one can do to travel this difficult path and achieve this vision. These three ingredients will then cultivate hope that the organization can overcome the prevailing issue.

C. Constantly challenge, refine and update your mental models and those of your team

Mental models inform how we make sense of things and orient ourselves in any given situation. They reflect our understanding of the world around us, but not the actual world. As Alfred Korzybski, the Polish philosopher famously said, “the map is not the territory”. Alan Watts, the Buddhist philosopher, described this in more modern terms as, “the menu is not the meal”.

Our mental models are informed by what we have learned through our experiences, as well as the things we have observed, read or heard. They reflect our beliefs on what a set of information means, or what the likely consequences of an action will be.

We have different mental models for different situations. For example, a CEO of an organization is likely to have mental models about strategy, marketing, financial management, leadership, culture and the sector in which the organization operates. A successful CEO who has been able to strengthen and grow their organization, is likely to have more refined and updated mental models than a less successful CEO.

Our mental models are like pieces of mental software that we use for different situations. We upgrade our ‘software’ as we learn new things. We have different software for different tasks. If we use the wrong or outdated software to solve a problem, then the solution may elude us.

We struggle to see things outside of our mental models. For example, when I started working in the mid 1990s, I remember how charitable and philanthropic work was the exclusive domain of non-profit organizations in South Africa. Then in the early 2000s, I noticed how businesses started to compete with non-profit organizations for government contracts to do this type of work. I distinctly remember how blindsided and flabbergasted most non-profit organizations were. Their mental models did not consider the possibility that businesses were capable of any positive social or environmental impact. And because their mental models were too narrow in this regard, they did not see this trend emerging, and I know of several organizations that had to close their doors.

A culture of learning assists an organization to improve its collective mental models, and thereby become more effective at orienting itself. Speaking of myself, I primarily learn through my experiences, from my colleagues and mentors, and from reading extensively and listening to podcasts. These all challenge my mental models. The many hours that I invested in this article, which was originally three times as long, has also helped me to refine my mental models about how organizations learn and become more adaptable.

After-Action Reviews - a formal and structured method of debriefing after an event or time period - are also effective at helping organizations to update their mental models through reflecting on their experiences and how they should do things in the future.

It is also useful to adopt a 'meta view' of our mental models. Rather than accepting that what we understand or believe about an issue is 100% accurate and right, we can learn to see our mental models as tools that we are using. I know that when I dissociate in this way, I become more open to flaws in my model and other ways of thinking about an issue. This openness makes it quicker and easier to upgrade my mental models.

Leaders must challenge and interrogate their mental models whenever they can. Professor Pieter Le Roux, who I studied under at the University of the Western Cape, wrote the following in Flight of the Flamingos (1992) about a scenario planning exercise that took place at the end of Apartheid:

> *"Mental maps must be challenged because they can undermine the true potential of a society. No-one can deny that great catastrophes have befallen countries which had all the potential for success, simply because the key actors were prisoners of inappropriate mental maps. At crucial stages, ideas, which do not determine outcomes often, are of crucial importance in determining the collective future of a nation."*

D. Avoid dogma and other absolutes wherever they are found in an organization

The concept of 'dogma' is typically associated with religious zealots who refuse to budge in their beliefs and practices. There is dogma to be found in all religions and organizations.

Dogmatic mental models are seen as 'incontrovertibly true', sacred and non-negotiable. Dogma is insidious. It undermines organizations' abilities to interpret new information and adopt new responses - i.e. orient themselves.

When we are under extreme pressure or fearful, people and organizations tend to revert to their dogma. They become less open to new ideas. They tend to look inward rather than outward. I touched on this when I described the Threat-Rigidity Thesis. This pattern of thinking presents obvious risks to our organizations as it narrows their thinking and makes them less flexible.

John Boyd warned that all doctrine becomes dogma over time. In other words, wise and established practices that are an asset will ultimately become a liability that constrains an organization in its growth.

For example, one organization with which I worked closely, believed the dogma that 'more detail is always better', which underpinned everything it did. It assumed that its clients would be prepared to wait for this to happen, even when these clients explicitly said otherwise. While there were admittedly circumstances where this precept was true, there were a growing number of clients who wanted the opposite - they wanted something high-level to be produced quickly. I have also dealt with organizations that spouted dogma like, 'all bureaucrats are idiots'

or 'the purpose of business is to make profits' or 'people could get out of poverty if they really wanted to'.

Dogma can also be linked to one's toolkit or one's profession. The Law of the Instrument is embodied by the saying, "to a man with a hammer, every problem looks like a nail". I have seen this principle manifest in many different ways. For example, I distinctly remember that when I started out there were hundreds of 'organizational development consultants' in South Africa's non-profit sector who fervently believed that almost every type of organizational problem was due to a lack of capacity and should be fixed by 'capacity building'.

Interestingly, another version of the Law of Instrument is known as 'Déformation Professionnelle' which is a tendency to look at things from the perspective of our profession. For example, the accountant will tend to want to cut costs, the marketing department wants to invest in new products, the military wants to plan an engagement, and the surgeon wants to operate. This phenomenon is also why multidisciplinary teams are central to the practice of social innovation and design thinking - they enable different points of view to be brought into the conversation.

Dogma tends to be subtle and harmful to organizations. It undermines their ability to interpret new information and respond properly to changing circumstances. It encourages leaders to fix new problems in an old way. It limits the ability of organizations to adapt. Therefore, leaders should constantly interrogate their own dogma and those of their organizations. This will ensure that they are not being limited by outdated thinking or being blindsided by something that they never expected or noticed.

E. Use clear language to describe and dissect what is being observed

I am on a quest to destroy abstract and poorly-defined jargon wherever possible since it encourages fuzzy thinking and misunderstandings, and impairs our ability to orient ourselves. As part of this mission, I host the Strategy and Social Enterprise Glossary which is updated every year with the help of numerous contributors with specific domain knowledge. I believe that organizations should develop their own lexicon that everyone understands and uses, and which is suitable to your context.

One useful tool for making sense of a complex situation or system is to use clear language to describe and dissect what is being observed. This involves isolating and naming each part of the system, then describing each part and the relationships between the parts. It helps if you have a whiteboard or flipchart or simply an A4 piece of paper at hand. Then when the components are conceptually reassembled, a clearer picture of the whole emerges.

Our use of terminology can also change when we are stressed or feel threatened. The Threat-Rigidity Thesis describes how stressed organizations revert to simpler language that no longer captures the complexity or intricacy of what is being observed. Political communication is also full of terms such as 'enemy insurgents', 'axis of evil', 'terrorists', 'socialists', 'collateral damage',

‘food insecurity’, ‘anarchists’ etc. These words poorly reflect the complexity of what they claim to describe. They are also the types of words that George Orwell cautioned us about in his famous essay, ‘Politics and the English Language’.

Leaders must therefore be very mindful of the type of language and terminology that they use when helping their organization to make sense of its observations and orient itself.

F. Engage your team in strategic conversations about your organization and its context

Regular, vibrant and interrogative strategic conversation may be more valuable than formalized strategic planning events. These conversations might be a formal part of the strategic process where there are a series of scheduled discussions. They might also be accidental. I have heard countless stories of incisive conversations that took place in the kitchen while people were making coffee or lunch at the office - conversations which changed how people understood an issue.

The strategic conversation helps to create a shared and updated map of the terrain and where an organization is in its journey. This makes it easier for leaders to make wise decisions that are embraced by the other people who were part of the conversation, and to facilitate coordinated action.

Strategic conversations typically explore what is happening outside of an organization and how the organization is responding to this information. For example, leaders might explore the dynamics, relationships, risks and opportunities that surround their organization. These conversations might also touch on internal strategic issues such as their organization’s capabilities, culture and financial position.

These conversations should also interrogate the ‘sacred cows’ of the organization, which form part of its dogma.

A mental map that is created by a team of skilled people, who are able to have healthy conversations, is likely to be superior to the one created by a single leader, regardless of how clever they are.

It also helps to include people with a diversity of viewpoints in this strategic conversation. Organizations are likely to see more clearly when they interpret their observations using different perspectives and mental models, which can be achieved using multi-cultural teams or with people from different professions.

The need for diverse thinking when formulating the strategy of an organization, reminds me of the Law of Requisite Variety, developed by W. Ross Ashby in the 1960s. He was a psychologist and one of the founders of the field of cybernetics. He said that:

> *When the variety or complexity of the environment exceeds the capacity of a system (natural or artificial) the environment will dominate and ultimately destroy that system.*

In other words, an organization should have the capacity to understand and respond to more changes than its environment is capable of producing, and having a variety of skills and viewpoints can assist organizations to do so.

It is obviously more difficult to have a strategic conversation when an organization is stressed. According to the Threat-Rigidity Thesis, organizations that feel threatened tend to become more uniform in their thinking, with maverick thinkers and dissenters being excluded from conversations and decision-making, and losing influence with the group. This can result in Groupthink where a team appears to be unanimous in their thinking and hold a narrow or irrational interpretation of events. This tends to lead to an ill-advised course of action which everyone falsely appears to support.

G. Tell stories that convey meaning about what is happening inside and around your organization, and why it has chosen to respond as it has

Stories help us to orient ourselves. They assist us to make sense of things. They give context to events and locate them in time. They identify key characters and describe how they interact with each other. They enable us to make sense of the complex dynamics of a system by using metaphor and drawing parallels with other systems. Stories can motivate people and create momentum.

For hundreds of thousands of years, our ancestors used stories to update their mental models. One can easily imagine a group of hunters or warriors sitting around their campfire in the evening, telling stories about their day and what happened, and collectively making sense of what they learned. Valuable stories passed down through generations. They formed part of a tribe or organization's base of knowledge.

While researching this article, I realized the importance of storytelling in helping organizations to orient themselves. For example, a couple years ago I facilitated a workshop for a national association of non-profit organizations that operates within the primary healthcare sector. It had recently undergone a change in leadership and its strategic context had changed. There was a lot of dissatisfaction amongst its members. We spent two days unpacking a story about the journey of the organization over the past 20 years, why certain decisions had been made, and the consequences of these decisions. This process helped participants to understand things in the same way. Once everyone's mental models had aligned, we were able to move forward and make agreeable decisions about the future of the organization.

Storytelling is an integral part of scenario planning - a strategic methodology that is used by governments, large organizations and the military to prepare themselves for the future.

Scenario planning works by filtering information to identify key trends, stakeholders and other forces that are likely to exert a disproportionate influence over the future. Participants then assimilate this information to create a set of scenarios of what the future might look like. Participants then describe these future scenarios and develop stories for how each came to pass. The process ends when the participants share these scenarios and stories with the people in their organizations, and interrogate what it means for them.

All countries and organizations are rife with stories. I sometimes reflect on the stories that helped to bring about the end of Apartheid in South Africa. There were the stories about the 'verligte' (i.e. enlightened Afrikaners) and 'verkrampte' (i.e. conservative and narrow minded Afrikaners) in the 1960s, 1970s and 1980s. This helped the Afrikaner people to relinquish power and accept the transition to a democratic government in 1994. Then there was Clem Sumter's 'high road' and 'low road' scenarios that he presented throughout the world (and to my class at university). I also remember the Mont-Fleur scenarios in 1990-1991 which explored what South Africa might look like in 2002, which was 10 years into the future. All the political parties took part in this exercise. The South African government also carefully cultivated the story of the 'rainbow nation' in order to promote national unity, but this story has become less credible over time.

But stories can also cause immense harm. As I write this article, I see how some politicians are telling stories about how immigrants from outside South Africa are stealing all the jobs and consuming resources meant for locals. This story is being used to spark and justify xenophobic violence. Leaders must therefore be careful about what stories they tell and how others interpret them, since people tend to relate to stories more than facts.

Stage 3 in the OODA loop: Decide what must be done

Once leaders have orientated themselves and their organizations, they need to decide what to do about it. The quality of these decisions are informed by how well they were able to gather the necessary observations and determine what they mean.

When there are minimal risks involved, making a decision is a straightforward process. For example, when I go to a supermarket to buy some coffee, I might decide to buy a brand that I do not know. The consequences of making a poor decision have limited consequences for me, although I do like good coffee. There is also minimal risk for organizations that encounter problems that they are accustomed to dealing with, such as deciding to hire someone new or launch a new product.

It is only when the well-being or survival of an organization is at risk, that how it uses its OODA loop will really start to matter. Under these circumstances it becomes much more difficult to make the strategic and operational decisions that will help the organization to adapt and thrive in its new environment.

It is in situations such as these when leaders must be comfortable making decisions with inadequate or ambiguous information, before they have had time to properly assimilate it. Then leaders must learn how to estimate the probability that their decisions are the best ones under the circumstances and will produce the intended results. Leaders must also learn how to be curious and conduct experiments to test hypotheses and see how things work out. This will give them more information about the opportunity or problem that their organizations are facing. Finally, once leaders have made the 'big picture' decisions, they must delegate the smaller decisions to their subordinates and/or colleagues, and ensure that they have sufficient power to be able to make and implement these decisions.

The good news is that all decisions produce action, and action produces more observations as the OODA loop returns to its starting point. With each cycle, we are able to refine our decisions and become better adapted to our environment.

There are five tactics that we can use to help our organizations to orient themselves more effectively, and I will discuss these below.

A. Become capable of making decisions with incomplete, ambiguous, biased and possibly inaccurate information

When conditions are favourable, an organization can simply decide to gather more information and return to the observation stage of the OODA loop.

However, there are times when an organization must make an urgent and important decision to avoid loss or harm, and when there are diminishing returns, prohibitive costs or insufficient time to gather more information. It may also be impractical to do so. In such instances, it is irresponsible for a leader to delay decisions in order to try and get more information.

I am familiar with too many tragic examples of organizations that waited too long before making a decision. Consequently, they missed a one-in-a-lifetime opportunity or succumbed to a threat that they dreaded. I recall several large non-profit organizations that were given two or three years' notice that a cornerstone donor or client was leaving them, or that a government policy would devastate their income streams. These organizations had sufficient time to make some decisive decisions to reduce their financial overhead, reposition themselves and develop new capabilities. Sadly, they spent these years in denial or trying to gather more information when they should have made some hard decisions and taken action. These situations did not end well.

These tragic events might happen because leaders are perfectionists who are fearful of getting their decisions wrong, messing up, getting into trouble, looking bad or losing prestige. These are legitimate human fears and I have experienced my fair share of them.

Sometimes leaders lack the power to make the right decisions and are beholden to others who want to either delay the decision or gather more information.

Then there are times when 'red tape' will get in the way - these are bureaucratic procedures that must be followed before a decision can be made. Red tape makes it exceedingly difficult for leaders to make the decisions that they know will benefit their organizations.

But ultimately, I think it is more about courage and leaders learning to be comfortable with making important decisions with imperfect information or insufficient time to properly orient themselves.

To become comfortable with making decisions in these circumstances, leaders will need to accept three truths. First, they must recognize that there will always be a gap between their mental models and the truth of what is happening in their environment. This is especially the case where the organization is grappling with a crisis that it has not encountered before. Second, they must be aware that there are risks in delaying a decision for too long. These risks might range from losing an opportunity to a competitor through to failing to comply with a government policy in time. Finally, leaders must realize that the moment they decide to act, more information will be revealed about the situation that is confronting their organization. This action may produce a higher quality of observations than could have been gathered in the absence of action, especially where the existing observations are producing diminishing returns.

On a cautionary note, it is dangerous for leaders to believe that their decisions are infallible - something that happens more often than people might think. Such leaders might believe that the information that they have sourced is complete and their understanding is perfect. This level of arrogance or self-assuredness will almost certainly lead to blindspots in their vision to the detriment of their organizations.

B. Learn how to estimate the probability that a decision will produce its intended result and to choose the course of action that is most likely to advance your organization

When there is an absence of information or knowledge about a situation, leaders must become skilled at taking bets against the future and estimating the probabilities that an initiative will succeed. Competent leaders make the right bets most of the time; bad leaders do not.

However, many of the leaders I encounter are overwhelmed by the strategic choices facing their organizations. They have realized that they have limited resources such as time, attention, money and people. They recognize that they cannot pursue all opportunities. Neither can they protect against all threats and risks with equal enthusiasm, despite wanting to do so. They have learned that the future is uncertain and unpredictable, and that the impact of their choices cannot be known for sure.

It is a calculated gamble to estimate probabilities about a course of action and to be appropriately decisive. But it is one that we are making all the time for our organizations, and

in our lives. Using intuition and available facts to estimate the probability that a certain set of actions will yield a desired outcome, and to weigh up the risks of getting it wrong, is something that leaders must do each day. It is integral to running a successful organization. Unfortunately, there is no magical mathematical formula that teaches leaders how to do this. One develops the skill through trial and error, and learning from the mistakes of those who came before.

Leaders can mitigate the agony of choice by gathering more information and speaking with advisors. However, this assumes that there is sufficient time to do this. At some point, this homework will start to produce diminishing returns and leaders must be careful not to be stuck in "analysis paralysis". Leaders must then make their choices and roll the dice.

Since the future is unknown to us, and perhaps not as predictable as it used to be, these choices carry an inherent risk. We can wait for the future to reveal itself, but then it may be too late. The opportunity may vanish, or the risk may undermine our organizations. To mitigate these identified risks, leaders must also refine their skills at estimating the probability that a risk or threat will occur, and the consequences of this.

When estimating probabilities, leaders must overcome a long list of cognitive biases that undermine their ability to think clearly and forecast what is likely to happen. The four that I notice the most are the normalcy bias, optimism bias, planning fallacy and pessimism bias. These biases are insidious and distort the probability that an event will occur or that an initiative will succeed.

At the end of the day, leaders are imperfect beings and organizations are flawed constructions. Leaders are bound to make bets that fail as they make rapid and uninformed decisions to advance their organizations. This is life. It is unfair and short-sighted to think a leader is incompetent because a bet has backfired. However, if a leader makes bets that consistently backfire, then it would be fair to question their competence. But always remember that there is more danger in a leader not acting, than acting in the face of an unknown future. I have seen more organizations flounder or fail to adapt to change because of inaction than because of poor action.

C. Decide to conduct experiments to learn more about the challenges or opportunities that are confronting your organization

Sometimes it is unwise for an organization to decide to commit all its resources to a course of action. This is especially the case when it is dealing with a complex adaptive system which is difficult to understand and may change in response to your actions. This complex system might be a community that an organization wants to help, a marketplace it wants to dominate, a restructure it wants to undertake, or a social problem such as homelessness that it wants to eradicate.

In such situations, leaders are likely to have a theory about how the system functions that they developed through inductive reasoning. They can then use deductive reasoning to form and

test hypotheses about how the system will respond to their actions. If the evidence supports their hypotheses, then their theory is upheld (for now).

For example, I am aware of experiments that Hurambee Youth Employment Accelerator and Abdul Latif Jameel Poverty Action Lab (J-PAL) have done to determine the type of interventions that most help young jobseekers to find employment. These range from career counseling, providing them with money for airtime, data and travel, and other interventions. There are also countless other examples such as those non-profit organizations that have done experiments with micro-business franchises or methods of helping youth to adopt more responsible sexual behaviour. I have also encountered businesses that have launched a new product to a limited audience or tried a new approach to managing a project.

And recently we have all heard and read about the experiments to determine the efficacy of vaccines before billions are invested in manufacturing and distributing them.

This deductive and experimental approach makes it easier for organizations to decide to take limited action rather than procrastinating or trying to gather more information before making any move.

D. 'Fail fast' rather than slowly

There will be times when an organization has insufficient time or resources to conduct the types of experiments that I touched on in the previous section. Perhaps they are an entrepreneur who has limited funding and needs to launch their product as soon as possible, or perhaps a government must 'lockdown' the movement of people in order to prevent the spread of the coronavirus - something we have all experienced recently.

In such instances, an organization must decide to fully and boldly embark on a course of action knowing that it may fail to produce the intended outcome. Then as their actions produce more observations, and as they orient themselves, they might find that they are on the wrong path and that unintended consequences have appeared. Consequently, they need to pivot rapidly or revise their approach. It may be much better to use this tactic than to delay your decision or to have false hope that things will simply get better on their own.

This tactic of 'failing fast' relies on trusting the ability of one's organization to adapt as new information emerges, and even be prepared to shut down or discard the endeavour and start anew if necessary.

This tactic can apply to starting a new business or launching a new project. There is a well-known saying among stockbrokers that "your first loss is your best loss" since the resulting pain triggers your awareness that something is not working and gives you an opportunity to reappraise your situation and perhaps let go of those stocks. There is a similar principle advocated by both the lean startup methodology and the agile software development approach that it is better to 'fail fast' than slowly since this accelerates the feedback loop and enables quicker iterations of improvement.

However, I have observed the reluctance or inability of many organizations to decide on the 'fail fast' approach, even in the midst of a crisis.

It might be that the organization is 'dead in the water' - a naval metaphor for when a ship is unable to move forward or take evasive action against enemy fire because of a lack of wind or because of damaged sails, engines or steering apparatus. I see this when organizations take a year to make decisions when the world is rapidly changing around them. This might be because the organization is cautious or risk averse by nature or because it is in a state of decision paralysis. Either way, it exposes the organization to risk and lost opportunities. It slows down the speed at which it navigates through its OODA loop. When an organization is 'dead in the water', the results are predictable. The organization will fail to adapt and ultimately go under. Its competitors will take over.

The reluctance to decide to cut losses and make a necessary ending may also be attributed to the 'sunk cost fallacy'. This is a cognitive bias that occurs when organizations have invested significant amounts of money, time and other resources in an endeavour. Then when they are faced with clear signs that it is not working, they convince themselves that they are 'almost there' and need to put even more resources into their endeavour to make it successful. Economists believe this approach is irrational and that decision-makers should let bygones be bygones. They believe a more rational approach is to constantly assess future costs versus future benefits. A textbook example of the 'sunk cost fallacy' is the partnership between the United Kingdom and France to develop the Concorde - a supersonic jet that flew across the Atlantic Ocean between 1976 to 2003. This project was originally assigned a budget of £70 million, but was estimated to have cost between 1.5 billion to £2 billion (in the currency value from 1976) by the time it was finally shut down. This is 21+ times greater than the original estimate.

Leaders may also need to overcome their fear of failing as it takes courage to decide to end something. Over the course of my career, I have had to help shutdown a handful of organizations, one of which I was at the helm. I remember feeling that I had failed or that I lacked the determination or skills to make it work. I remember thinking that other leaders might have succeeded where I had not. I struggled to let go of the false hope that things would succeed by some miracle if only we waited a bit longer. But ultimately, I had to find the courage to be bold enough to shut down the organization in much the same way as I have needed to shut down or revamp my projects and other strategic initiatives.

In conclusion, just as leaders need to be bold in deciding to commit to a course of action, they need to be equally bold to cancel or revise it should their observations and intuition tell them that it is not working.

E. Leaders should decide on a direction but delegate further decisions

Fortunately, leaders do not need to make all the decisions required for a course of action. They simply need to make the big and high-level decisions that set the direction and parameters for the strategy, and unlock the resources that are required. This puts things in motion. They can then delegate the further decisions to their colleagues and subordinates.

When organizations can decentralize much of their decision-making, they expand the mandate of people at each level to make more significant decisions. This provides people with more autonomy to respond to the problems or opportunities they encounter in front of them.

Conversely, when leaders try to centralize all decisions, their organizations slow down as subordinates escalate decisions to top management and wait for decisions to be handed back down to them. These organizations become less responsive to changes in their environment. Leaders are also likely to become overwhelmed, experience decision-fatigue and exhaust their mental bandwidth. This in turn impairs their OODA loops.

To successfully delegate decisions, leaders must strive to achieve four leadership outcomes among their team members, subordinates and followers. Followers must be crystal clear of their leader's intention and the rules of engagement to be followed. Followers must feel encouraged, appreciated and connected. Followers must have sufficient power to make their own decisions. Finally, the followers must have the tools, resources, skills that they may need to work effectively. When leaders achieve these outcomes, their organizations become stronger and can adapt more quickly to their environment.

Admittedly, it is not easy to delegate decisions and achieve the above leadership outcomes. There is always the tendency to try and micro-manage the details of something that must be done and not to trust a subordinate's judgement. There is also the habit of trying to hold on to tasks that could be delegated, and to make excuses such as that it can be done quicker if the leader does it themselves. Finally, leaders tend to struggle to do their duties when they are angry, frustrated or stressed.

To sum up what I have just said, when leaders are not able to delegate effectively, they slow down and impair their organization's OODA loop and ability to respond to crises and opportunities, and adapt to their changing environment.

Stage 4 of the OODA loop: Act swiftly and decisively

Organizations that can act swiftly are more likely to adapt to their environment and be successful than those that are tentative in their actions. This is provided their actions are based on wise decisions and an accurate appraisal of the situation.

The concept of 'swift action' resonates with me. Alternative terms such as 'quick', 'fast', 'rapid', 'speedy' often imply hurried or erratic action; they do not have the same connotation of ease-of-action and smoothness of movement as the term 'swift' does.

It is only when an organization acts upon its system, that further observations are triggered, which in turn enables the OODA loop to embark on its next cycle. This new cycle then reveals new problems and challenges for the organization to tackle, though hopefully these are 'better' problems than the previous ones. For example, when an organization resolves the problem of how to get funding for a project, then the problem of how to implement the project emerges. And when the project is completed, then the organization faces the problem of how to evaluate its impact and extract the lessons for next time. Organizations adapt as they become better at anticipating and overcoming problems.

A film crew is a good example of an organization that can function swiftly. I have two friends and a client in the film industry. They always marvel at how slowly organizations outside the film industry respond to the many challenges that emerge each day. Successful film crews have adopted a culture of action, which requires everyone to trust that their team members will perform their roles effectively. Their organizational structures also tend to be flatter and more fluid. Furthermore, everyone should have the resources they need to do their work. These characteristics help film crews to act swiftly and move efficiently through the final stage in the OODA loop.

A. Embrace a culture of action

Early and definitive action will tend to produce a disproportionate advantage for your organization. It will help you to grab an opportunity as it passes by or slow the trajectory of a crisis. Your organization might have a brief window of time to take action, which will close if you wait too long. Inaction carries its own risks!

General Patton led several armies during the second world war in the fight against the Axis Powers. He was a charismatic but controversial American general. He had a reputation for being coarse, outspoken and impulsive. He was renowned as someone who was good at winning battles and outmaneuvering the enemy. General Dwight Eisenhower had to rescue him from being fired on several occasions because he could see Patton's strategic value to the mission. General Patton once said that, *"A good plan, violently executed now, is better than a perfect plan next week"*. This recognized the value of acting early in order to grab an emerging opportunity or defend against an imminent threat.

Consider the HIV/AIDS crisis in South Africa. I spent most of 1991 working as a paramedic attached to a community clinic in the Northern Cape. We had just started to detect HIV infections among our patients, but the government was very slow to take appropriate action. The prevalence rate of HIV in our population was a high 13.1% in 2018 according to Statistics SA. South Africa has the highest number of people infected with this disease in the world. The government was slow to act, partially because it had adopted the wrong mental models (e.g.

that AIDS is not caused by HIV) and because it was very slow to secure and distribute antiretroviral medicines. In 2017, a quarter of all deaths in the country was attributable to AIDS. Think of how many millions of lives might have been saved if the government had not fumbled its way through its OODA loop in the 1990s and early 2000s.

This culture of action must permeate the entire organization. It cannot just be the CEO or people at the bottom ranks that must take action. Otherwise, you have a leader that shouts 'go go go' when the people in the front ranks are either unwilling or unable to implement this mandate. Similarly, I have worked with organizations where the operational staff want to move forward quickly but the required decisions are stalled by management. However, as a general rule, I have observed that the bias towards action must come from the top and that leaders must be congruent with what they're preaching.

Developing a culture of action will require that people are allowed to make mistakes and occasionally head down wrong paths, provided they learn from it and were not negligent in the first place. No one is going to take initiative and act quickly if they think they may get in trouble because of it.

When organizations take action, they also learn more about their environment and the challenges that they face. By acting on their system, they learn more about their system. I have reiterated this point through this article. For example, we have all experienced lockdowns of different types and durations in response to the Coronavirus pandemic. Governments had to act quickly to prevent the spread of this virus, and the act of lockdowns produced more information on the impact of the different types of lockdowns and which ones were most effective in each country. These insights informed future policy on lockdowns.

A final note is things rarely go according to plan. Remember the old adage by Field Marshal Helmuth von Moltke that, *"no plan of operations extends with any certainty beyond the first contact with the main hostile force"*. He oversaw the Prussian army during the 1800s. He believed that battle plans needed to be adaptable as each side has incomplete information and responds to the moves of the other. In other words, assuming that both sides have equal capabilities and resources, the side that cycles faster and more effectively through their OODA loops will tend to be more likely to win the engagement. It will be able to take swift action while the opposing side is still trying to figure out what is going on.

B. Cultivate a high degree of trust in your organization

Organizations are more likely to move swiftly when trust exists between its leaders, subordinates, departments, teams and even its key stakeholders. Cooperation requires trust, especially when there is a crisis.

When people are too focused on their own interests or that of their faction, and when their words and actions are incongruent, then a deficit of trust probably exists. People from such organizations will tend to be suspicious of the agendas and actions of their colleagues. This has

a range of negative consequences for organizations, including their inability to act decisively and effectively.

Stephen Covey in 'The Speed of Trust' (2008) advocated that the speed at which leaders and their organizations can get their stakeholders to trust it, is the most critical ingredient for their success. He said that when the level of trust goes down, then things tend to slow down and cost more. He identified five waves or circles of trust that leaders must establish. 'Self Trust' is the trust that people have in themselves whereas 'Relationship Trust' is the trust that exists between people - it is the belief that their team members will perform effectively and not backstab them. 'Organizational Trust' is the trust that leaders can generate within their organizations among people who may not have relationships with each other. 'Market Trust' is the trust that external stakeholders feel for the organization. Finally, 'Societal Trust' is how society feels about the organization given the value that it is creating for them.

The consequences of a low or high trust environment are even more amplified in a crisis, when organizations are under great pressure to adapt and are likely to have additional challenges to overcome.

C. Design fluid organizational structures that are capable of responding swiftly to a crisis and able to adapt to pressure

Fluid structures are the antithesis of the traditional hierarchical and rigid organizations that we have all experienced at one time or another.

For an organization to engage in effective action, there must be a level of coordination between leaders and those that are on the front ranks. This can be impeded by organizations with extensive hierarchies when it takes much longer for information to move up and down the chain of command.

To overcome this in his organization, General Mattis who ended up serving as the Secretary of Defense in the United States, promoted the idea of 'skip-echelon communications'. This principle enables members of an organization to go directly to the person with the power to make the decision they require, or to whom they must coordinate their actions, even if that person is a couple levels up in their organization. Provided this process does not become a chronic method for undermining managers or micro-managing staff, it can speed up the process for coordinating action within an organization.

Rigid and hierarchical organizations will tend to be burdened with silos - i.e. departments or teams that operate entirely independently of one another, and rarely communicate or coordinate their actions. I recall when we developed a social entrepreneurship strategy for provincial government, and how much we struggled to get some departments to coordinate their plans with regards to this strategy. It is the leader's job to break down silos in their organization. It may also be beneficial to create networked teams with members from different parts of an organization and to empower them to take appropriate action.

I have also come to believe that organizations should develop the capability to expand and contract as needed, and to reduce their fixed cost structure as far as possible. This enables them to appoint and deploy teams that are well-suited to tackle the challenges they are assigned. By lowering their financial overhead, they also reduce their levels of financial risk.

Finally, I have observed the benefits to flattening organizational structures where possible if it can be done in a way that does not overburden people. By bringing leaders closer to the front ranks they have more exposure to the problems that their subordinates are experiencing. Flattening an organizational structure will also require everyone to have the resources and power that they need to fulfill their responsibilities. Martin Reeves and Mike Deimler of The Boston Consulting Group described this as follows in Adaptability: The New Competitive Advantage (2011):

> *"A flexible structure and the dispersal of decision rights are powerful levers for increasing adaptability. Typically, adaptive companies have replaced permanent silos and functions with modular units that freely communicate and recombine according to the situation at hand."*

All these methods of cultivating more fluid organizational structures depend obviously on the exact situation. They also require people to have the appropriate skills and the organization to have the necessary systems in place.

D. Ensure that departments, teams and people in the organization have the resources that they need to take swift action

People and organizations require resources to act effectively. These might include money, information or access to people. Giving someone responsibility while withholding resources is a sure way to set them up for failure and undermine morale in the organization.

When an organization, or department or team within it, has insufficient resources to act and achieve its mandate, it needs to reevaluate and renegotiate what it is trying to do.

There are obviously times when resource constraints will encourage innovation and efficiency as organizations must develop new ways of achieving their objectives. Most recently, we have seen how organizations in the healthcare and education sectors have been able to use technology to fulfill their mandate in new and interesting ways.

But a shortage of resources can also set up the organization for failure. For example, I recently spoke with a social enterprise that manufactures nutritious meals for children to prevent their growth from being stunted. These high-quality meals are admittedly more expensive than those purchased by government feeding schemes. When their donor decided to pay them the same rate as these low-cost meals, the number of meals that would be funded had to be renegotiated rather than lowering the cost (and therefore quality) of each meal.

But even if an organization has sufficient resources, there is still the problem of getting them to the people within these organizations who need them. Some managers may be unwilling to relinquish control of them, possibly because they want to exert their power or are anxious about how they will be used. Gallup's employee engagement survey found that only a third of American employees that it surveyed agreed with the statement, "I have the materials and equipment I need to do my work right". Leaders therefore need to step in and help unlock these resources so the right people use them.

There are a wide variety of resources that people might need to do their work effectively. These include: money; information; additional team members; access to other people both inside and outside of their organization; tools, equipment and other supplies, and power to make decisions.

To conclude with the obvious, organizations will struggle to act swiftly and effectively if they have fewer resources than they need. This impairs their ability to cycle effectively through their OODA loops.

5. The OODA loop requires direction to function effectively

We must remember that the OODA loop works effectively when it is anchored by a clear vision, direction or intention. This gives meaning to our OODA loops.

Without a clear direction, the OODA loop becomes meaningless, much like a car driving quickly and frequently spinning its wheels with no destination in mind. It becomes impossible to determine what to observe and how to make sense of this information. There are no criteria to evaluate decisions or measure the effectiveness of action.

It is a common doctrine in the military to issue a brief known as the 'commander's intent' at the start of each mission. This is a memo that clearly defines the desired end-stage of the mission and the constraints and rules of engagement to be followed. It is distributed to everyone involved in the mission. It provides the basis for planning at all levels of the organization, and when the mission is launched, it enables everyone to stay focused and adapt appropriately to their environment. Here is an extract from Call Sign Chaos: Learning to Lead (2019), which describes how General Mattis wrote his 'commander's intent' before launching a campaign:

> *"In drafting my intent, I learned to provide only what is necessary to achieve a clearly defined end-state: tell your team the purpose of the operation, giving no more than the essential details of how you intend to achieve the mission, and then clearly state your goal or end state, one that enables what you intend to do next. Leave the 'how' to your subordinates, who must be trained and rewarded for exercising initiative, taking advantage of opportunities and problems as they arise."*

And outside of the military, those organizations that have clearly articulated philosophies and strategies will have the same clarity of purpose. For example, here is what Michael Hyatt said in the Vision Driven Leader (2020) about the importance of crafting a detailed vision:

> *"Vision, as I see it, is a clear, inspiring, practical picture of your organization's future. It does not have to be ten or twenty years down the road, though that might be helpful. I'm talking about an imagined future - usually three to five years out - superior to the present, which motivates you, which guides day-to-day strategy and decision-making, and around which your team can rally...If the Vision is compelling enough, people will apply their best thinking and efforts to figure it out, regardless of the obstacles and opposition."*

You might decide to set this direction at the level of your organization, or for a particular mission or project, or even to resolve a specific problem or grab an attractive opportunity.

But what's most important to know is that when there is a clear direction, the OODA loop has more meaning and becomes more focused. Then it becomes easier to focus your observations, interpret information with the right mental model, make the decisions and act accordingly.

6. Key insights from this article

Here are the seven most important insights I have gathered from writing this article.

Insight 1 - The world is an interconnected and chaotic place where organizations are part of a complex and intricate global system. Furthermore, technology is accelerating the pace of change.

Insight 2 - It is difficult to predict the future. I have little faith in convoluted plans based on rigid assumptions about how the future will turn out. It is better to have a clear vision and a handful of strategic goals, and then to construct an adaptable organization that can navigate its way through the turbulence and unknown, shifting strategy and tactics as required.

Insight 3 - Adaptability is largely about making sense of things and then responding appropriately to what we understand has happened or is likely to happen. I learned how powerful our mental models are and how cognitive biases and dogma sabotage our organizations. It is crucial that leaders constantly challenge and refine their mental models.

Insight 4 - Adaptable organizations use their OODA loops effectively. For many years, I held the view that adaptable organizations tended to have characteristics like better financial reserves, a diversity of clients, a good brand etc. Now I have realized that these characteristics are context-dependent and tend to be a consequence of how these organizations used their OODA loops. In other words, while these characteristics may *correlate* with adaptable organizations, they are not the original *cause*.

Insight 5 - OODA loops are everywhere. It has become more apparent how people and organizations are moving through the four stages of their OODA loops in response to new

observations. I see it in my work and personal life, in the work of my colleagues and clients, and in how leaders all around me are making decisions.

Insight 6 - I am using OODA loops more explicitly in my life and work, and it helps me to be more deliberate in my decisions. When I read or hear something significant or disturbing, I pause and ask myself, "what did I observe" and "what does this mean" and "what must I do?" I have found that by deliberately slowing things down in this way, I am less inclined to become overwhelmed and able to move through my OODA loop more effectively.

Insight 7 - I have noticed a natural evolutionary process among organizations. Some organizations adapt to change and get stronger. Some will die or be absorbed by other organizations. I used to feel depressed about the gaps that were left by organizations that couldn't adapt. Nowadays, I have seen that new organizations tend to emerge to fill these gaps, and that these organizations tend to be better adapted and more able to serve their customers and beneficiaries than their predecessors.

7. Conclusion

I started this article in June 2020 when the world was grappling with the coronavirus pandemic, and when I observed many organizations were struggling to orient themselves and decide what to do. I finished writing it in September 2021 as South Africa struggled through its third wave of this pandemic and dealt with the fallout of recent riots that resulted in tens of thousands of jobs being lost.

Over the past year and a half, it has become obvious that our organizations exist within a rapidly changing global system, full of the unknown and unexpected. Such trends are likely to persist, and perhaps even intensify. Organizations are likely to encounter many new opportunities to exploit and challenges to overcome.

Those organizations that can clearly observe what is happening, orient themselves, make quick and wise decisions, and act swiftly, are more likely to become well-adapted to whatever the future provides. In other words, those organizations that can use their OODA loops successfully are more likely to survive and thrive.

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