High Reliability Organisations

Combining the Psychology of Risk and Flow to achieve High Reliability.

Introduction

Failure is not an option, but in this VUCA[1] world, uncertainty and failure are indelible risks that require effective management and leadership to ensure the success and happiness of the organisation and its people. When uncertainty occurs, it creates instability, and it is this instability that creates failure.

In the 1970's psychologist, Mihaly Csikszentmihalyi, started researching a state of being where people found motivation and happiness in everyday tasks, this concept he called *flow* (Collin, 2011, pp. 198-199). *Flow* consists of eight principles centrally focused on completing tasks in a manner that balances complexity and skill to achieve high performance and happiness (Csikszentmihalyi, 2003). Once in a state of *flow*, thoughts and actions become robotic and automatic (Csikszentmihalyi, 2003) as if driven by the minds automatic, intuitive *system I* (Kahneman, 2011). As *flow* is a state of happiness that promotes productivity, innovation, and engagement (Csikszentmihalyi, 2003), similar to that of risk management, which involves improving performance, encouraging innovation, and supporting the achievement of objectives (Standards Australia, 2018), one can say there are direct links and benefits in achieving *flow* in the context of the *psychology of risk* and in creating a failure resistant and *high reliability* organisation.

The characteristics of *flow* include clear and concise goals, immediate feedback on performance, balance between challenge and skill, a narrowing of focus and on the present task, a sense of control over the task, an altered sense of time during the *flow* experience, and loss of personal ego (Csikszentmihalyi, 2003). Organisations that achieve *flow* will have higher performing workers, a happier, more fulfilled workforce, and a stronger culture.

This essay will look at associations between the *psychology of risk*, *high reliability* and *flow*, and conceptually how an organisation could develop an intelligence that promotes *flow*, in building a framework that supports *flow,* and in executing tasks during uncertainty in a state of *flow*.

1. Organisational intelligence that promotes *flow*

Risk intelligence is defined as *a living skill and applied attribute that enables better decision making to proactively embrace opportunity and manage potentially negative outcomes* (Schneider, Johnston, & Down, What is risk intelligence?, 2017)*,* and by definition embodies

[1] VUCA – a term used to describe the modern-day world as being Volatile, Uncertain, Complex & Ambiguous

all the critical elements required to achieve *flow* and *high reliability* in risk management. Three aspects that fall under *risk intelligence* that link *flow* and *high reliability* include having an awareness of the psychology of decision making, setting clear goals, and understanding the balance to create resilience and buoyancy.

The key starting point to developing the intelligence for *flow* in the context of *risk psychology* and *high reliability* is a baseline awareness. In order to focus on the tasks at hand (Csikszentmihalyi, 2003), predict failures (Weick & Sutcliffe, 2015) and make good decisions, organisations need an in depth understanding on how the mind works, how decisions are made and what influences a person's judgements especially when managing unexpected events. Dr Gavriel Schneider in his book *Can I See Your Hands* talks about *applied awareness* and that *the base line of awareness is that critical understanding of how I need to act, behave, scan my environment and be able to truly measure what may go wrong from a platform of real threat as opposed to inaccurate perceptions* (Schneider, 2017). This awareness is vital because as complex individuals, we all think and respond differently during times of stress. Schneider talks about the bodies' physical response to stress and its effect on cognitive performance and decision making (Schneider, Can I see your hands, 2017). Molecular neurobiologist, John Medina, also describes the effects of stress on cognitive performance and the minds functioning (Medina, 2014 pp. 57-81). In understanding the stress response, there is also decision-making influences. Decision making is a task that also requires comprehension, especially during critical events and when the difference between good and bad decisions can mean failure, how are these decisions made and what influences those making the decisions. Daniel Kahneman refers to two types of thinking, one is automatic, fast and intuitive called System I, the other is slow, calculating and analytical, called System II (Kahneman, 2011). The operation of these two systems plays a significant role in how people make decisions, the use of biases and heuristics, and how priming and framing can alter perceptions and influence opinion. Having an awareness of these attributes and their effects on decision making can result in better orchestration of the desired outcomes. For example, if operating in *Flow* is operating in an automatic state, then this is a function of System I mind. Knowing this, an organisation must ensure the people are skilled enough that their System I operates intuitively from knowledge and not from error prone biases and heuristics.

Other critical aspects of achieving *flow* and having a happy and successful organisation is creating purpose and developing goals. Aristotle inferred that happiness is the ultimate goal of human existence and in that of *summum bonum* or the greater good or purpose (Csikszentmihalyi, 2003). In an example from his book *Start with why*, Simon Sinek refers to two stonemasons' level of perceived happiness in their role in building a cathedral. Both doing the same tasks for the same money and under the same working conditions, one

happy one not. The difference between the two was a sense of purpose, the second stonemason believing he is part of something bigger. This purpose made him feel like he belonged, making him more loyal and more productive (Sinek, 2009 p. 95).The first principle of *flow* is setting clear goals, a clear purpose to one's actions, not only long-term goals that determine the business vision but short-term and immediate task-based goals (Csikszentmihalyi, 2003). Goals create motivation but also detract motivation if they are not achievable or are too easily achieved (Kahneman, 2011 pp. 302-304). This goal balance is also required to achieve *flow*, the task goals must be balanced between the challenge and the skill and require constant feedback (Csikszentmihalyi, 2003). If an organisations goal is to create a *flow*-centric environment it needs to ensure that the person gets the most out of the goals and not that the goals get the most out of the person (Csikszentmihalyi, 2003). Whether goals are derived from a greater purpose and vision, or are shorter-term performance measure such as KPI's, they must be clearly defined and well communicated to be effective.

There are many examples of balance in risk management that organisations must be aware of and manage, these include, the balance of risk and opportunity and creating a dynamic risk equilibrium (DRE) (Schnieder & Down, 2016), the balance of people and their values using the Competing Values Framework (Cameron, Quinn, DeGraff, & Thakor, 2014), and the balance of social and organisation hierarchies. Balance is also about being proactive as well as reactive, by having both presilience and resilience, by learning before a mistake with risk assessments and pre-mortems (Klien, 2007) and learning from mistakes using the hindsight, insight, foresight model. Balance comes from *thinking fast and slow* (Kahneman, 2011), maintaining a healthy mind and body and in the social and results focus of our leaders (Liberman, 2014). Leaders need to be aware of when to lead and when to follow and this is a great challenge that requires skill, a fundamental intelligence that is needed to create organisational *flow* (Csikszentmihalyi, 2003). Balance creates buoyancy and buoyancy creates stability, enabling recovery from turbulence.

2. Framing the environment to support *flow*

The key to maintaining organisational *flow* during uncertain events and thus creating *high reliability* is the organisations ability to assess anomalies, defer to the appropriately skilled people, and to engage in *flow* as quickly and seamlessly as possible. This requires a structure that removes *flow*-restrictive boundaries, it requires an organisational structure that has a balance of people, and it has a system to provide feedback on performance.

Certain situations and structures hinder one's ability to create *flow* and slows down reaction time, both of which are critical to managing unexpected events. These *flow*-stoppers include preconceived notions of time, and hierarchical structures bound by egotism. During *flow* people's perception and experience of time changes, for some people time speeds up and

for others time slows down, people tend to get lost in the moment (Csikszentmihalyi, 2003). During crisis management time is critical but time also hinders one's ability to achieve *flow*. Achieving this balance of time criticality and time-less *flow* in operations can be achieved by separating the two at different levels. Time-based goals distract operations from the task at hand inhibiting *flow* and limiting overall performance, as such time-based deadlines should be removed from the focus of operations, *the task will be complete when it is complete*. Time becomes the responsibility of the manager orchestrating the event, just like a conductor in an orchestra (Csikszentmihalyi, 2003), the managers role in operations is to manage decisions on resourcing labour and skill to meet time constraints by, deferring to expertise (Weick & Sutcliffe, 2015) when required or by increasing resources to speed up the process, not by speeding up the workers in *flow*.

Another hinderance to an organisations ability to manage unexpected events are steeply hierarchical structures. When the unexpected occurs, organisations bound by hierarchical processes such as multi-layered approvals and communications pathways, waste valuable time and resources, only to pander to organisational egotism (Leavitt, 2003), not to gain advantage through deference to expertise or effective collaboration as is required in good risk management practices (Standards Australia, 2018). *High reliability* structures require a flatter and more loosely coupled framework built on trust and expertise. This aligns to the characteristics of *flow* where one loses the sense of hierarchy, ego and power due to being total focus and immersed on the task at hand (Csikszentmihalyi, 2003).

The makeup of the organisation in terms of its people, their values and skillsets are critically important. When the unexpected occurs, the right person with the right skillset is to be engaged, and having that balance is where the *Competing Values Framework (CVF)* compliments *high reliability* and *flow*. The University of Michigan created the CVF to understand, map and leverage personal and organisation traits, their differences and their opposing tensions (Cameron, Quinn, DeGraff, & Thakor, 2014). DeGraff states that to have success organisations required the balance of all the quadrants (DeGraff, 2012), with this as a foundation for its structure the organisation is more likely to be successful at achieving *flow* and *high reliability*.

As well as structuring a balance of people, there must also be a system to provide feedback on goals and performance. Feedback is a characteristic of *flow* (Csikszentmihalyi, 2003) and in motivating and measuring for success. Performance measures, such as KPIs, provide a method for feedback on desired performance, but their effectiveness depends on how they are selected and the intent in which they are being implemented. KPIs should be a mix of short-term task orientated goals to induce *flow*, and long-term goals to align with the company vision and purpose. These goals must be designed to reflect the balance of the

individuals values as per the Competing Values Framework and must balance their social motivations with results-derived motivations (Liberman, 2014) for overall effectiveness.

By managing time and not managing by time, in building flatter loosely coupled hierarchies, and by designing the organisation with balance, the organisation creates a framework for *high reliability* through the *psychology of risk* and in creating a *flow*-inducive environment.

3. Execution tasks during uncertainty in a state of *flow.*

Execution of tasks in a manner that creates *flow* and *high reliability* requires sensitivity to operations, a preoccupation with failure (Weick & Sutcliffe, 2015) and total focus on and control over the task (Csikszentmihalyi, 2003). Managing tasks requires situational awareness to detect anomalies in operations and to make the appropriate decisions to rectify. At odds with popular belief, situational awareness whilst a good attribute for operational workers, during *flow* it is non-existent. People in *flow* are so immersed in the task at hand that they become blind to the world around them (Csikszentmihalyi, 2003), as illustrated by many awareness tests such as the moon-walking bear (dothetest, 2008). As this is a natural phenomenon due to the brains inability to focus on more than one task at a time (Cialdini, 2016), this idealistic state of situational awareness actually impedes people reaching a *flow* state. As such the focus on the task and a sensitivity for operations requires management and oversight.

The managers who orchestrate activities and tasks are required to ensure the balance between challenge and skill is maintained, this can be achieved by observation, reading the signs and listening to the cues (Csikszentmihalyi, 2003) but mainly requires ongoing communication and consultation (Standards Australia, 2010). When changes occur and the feedback indicates the balance between challenge and skillset is out, action is required to regain or maintain the state of *flow* and maintain operations. If the task becomes more difficult or changes, high reliability organisations defer to the needed expertise (Weick & Sutcliffe, 2015). Deferring to expertise allows transition between *flow*, from one person to another, from task to task. This dance is mindful organising (Weick & Sutcliffe, 2015) and allows the for continuation of *flow* and *high reliability*. For a simplified example, a process worker on a production line is in a *flow* moment, the production line stops due to mechanical failure, the process worker's *flow* stops as does productivity. A plant mechanic is required to fix the fault as it is not within the skillset of the process worker. The organisation defers to the expertise of the mechanic who then enters a different task *flow*. The mechanic rectifies the fault and the plant starts, the mechanics *flow* stops, and the process worker returns to again enter *flow*. While a simplified example of the interaction between some of the principles of *high reliability* and *flow*, it exemplifies how managing unexpected events with the right mentality and frameworks can minimise the impact of that event.

Conclusion

To create a successful organisation requires happy people. Happy people are engaged, innovative, loyal and high performing. This is what creates *flow* and *flow* shares similar attributes to the *psychology of risk* and together create a platform for *high reliability*. Organisations need an awareness of *risk psychology*, *flow* and *high reliability* before it can build a framework to support it. Once in place it requires a commitment in execution, task by task, person by person, time after time and unexpected event after unexpected event. If maintained it creates a strong platform for an organisation to succeed in this volatile, uncertain, complex and ambiguous world. A world that is only volatile if you don't know how to respond, uncertain if you fear the unknown, complex if averse to learning, and ambiguous if no plan is in place to greet it. The *psychology of risk*, *high reliability* and *flow*, it's just good business.

References

Cameron, K. S., Quinn, R. E., DeGraff, J., & Thakor, A. V. (2014). *Competing Values Framework* (2nd Edition ed.). Cheltenham: Edward Elgar Publishing, Inc.

Cialdini, R. (2016). *Pre-suasion: A revolutionary way to influence and persuade.* London: Random House Books.

Collin, C. e. (2011). *The Psychology Book.* London: Dorling Kindersley Limited.

Csikszentmihalyi, M. (2003). *Good Business: Leadership, flow and the making of meaning.* New York: Viking.

DeGraff, J. (2012). *Youtube*. Retrieved September 02, 2019, from https://www.youtube.com/watch?v=45veR-Se-rI

dothetest. (2008, March 10). Retrieved October 2019, from Youtube: https://www.youtube.com/watch?v=Ahg6qcgoay4

Kahneman, D. (2011). *Thinking, Fast and Slow.* New York: Farrar, Straus and Giroux.

Klien, G. (2007, September). Performing a project premortem. *Harvard Business Review*, pp. 18-19.

Leavitt, H. J. (2003, March). Why hierarchies thrive. *Harvard Business Review*.

Liberman, M. D. (2014). *Social: Why our brains are wired to connect* (1st Edition ed.). New York: Broadway Books.

Medina, J. (2014). Stress: Brain Rule #4. In T. Cutchlow (Ed.), *Brain rules: 12 principles for surviving and thriving at work, home and school* (2nd Edition ed., pp. 58-81). Seattle: Pear Press.

Schneider, D. G. (2017). *Can I see your hands.* Irvine: Universal Publishers.

Schneider, D. G., Johnston, D. P., & Down, K. (2017). What is risk intelligence? *Risk Management Today, 27*(3), 43-47.

Schnieder, D. G., & Down, K. (2016, December). Dynamic risk equalibrium - the next wave. *Risk Management Today*, pp. 180-182.

Sinek, S. (2009). *Start with why.* New York: Portfolio Penguin.

Standards Australia. (2010). *HB 327:2010 Communicating and consulting about risk.* Sydney: Standards Australia Limited.

Standards Australia. (2018). ISO 31000. *Risk Management - Guideline*. Sydney, Australia: Standards Australia.

Weick, K. E., & Sutcliffe, K. M. (2015). *Managing the unexpected: Sustained performance in a complex world.* New Jersey: John Wiley & Sons, Inc.