

Thinking
Fast vs
Thinking
Slow

Objectivity
vs
Bias?

Risk
attitude

Danger?
Opportunity?
Risk?
Uncertainty?

Risk-based
decision-
making

Risk
Leader

Threat response?
Risk readiness?
Risk intelligent
response?

Personal and
organisational
risk
management

Creating risk
resilient
people,
processes and
systems

Emotional
Intelligence

Critical thinking and risk-intelligent decision-making in the Covid-19 age

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Managing risk effectively requires a high level of critical thinking and advanced decision-making skills. But complex, multifaceted risk management is not a natural act for humans. We are wired for automatic, knee-jerk reactions and riddled with biases and heuristics, the subconscious mental connections that allow quick judgements. To make the right decisions, we need to be able to assess the available facts objectively and regulate our instinctive and emotional responses. In a crisis such as the one created by Covid-19, the challenge is to be able to assess risk critically and provide measured, unbiased responses,

thereby protecting and creating value for our organisation.

The psychology of threat response

Evolution has primed us to respond with a flight or fight reaction when faced with a threat. This first response is fast, and prone to be influenced by our emotions and our existing biases. It is often called 'System 1' thinking, a term popularised by psychologist Daniel Kahneman in his 2011 book, *Thinking, Fast and Slow*. A System 1 response is often the first subconscious decision point, and this sort of knee-jerk thinking is undesirable when critical and complex problems need to be pondered and solved. When seen through the lens ►

of System 1 thinking, the biological role of emotion is to produce a fast and specific reaction to an inducing situation. However, this becomes harmful when decisions regarding risk involve prediction, ie, thinking far into the future. For decision-makers in organisations faced with non-local risks, such as the impact of Covid-19, where a multivariate mental analysis is needed, this System 1 thinking will often lead to a wrong decision.

So how can we avoid falling into this trap? Emotions bestow humans with large capacity for directed and intentional responses. In System 1 thinking, these responses are fast triggered by uncontrolled emotions. Elements of emotional intelligence (EI), such as self-awareness, self-management and social awareness (see sidebar, right), can help us gauge and, where needed, bypass the System 1 reactions through monitoring our feelings and managing them. If we are able to slow down our thought processes, focus on objective facts and view our own emotional reactions in a self-aware manner, we have a greater chance of making a rational decision. This is known as System 2 thinking, a deliberate and complex mental process in which the decision maker makes all possible attempts to remove bias, weigh pros and cons, and overcome misleading emotional triggers to challenge their own assumptions and explore different courses of action and their possible outcomes (consequences). System 2 thinking is risk-aware thinking and from a personal standpoint, is risk-based thinking.

Defining attitudes to risk

How we respond when faced with a threat is also determined by our underlying attitude to risk and our appetite for it. There are four main descriptors of risk attitude:

- Risk averse: an increased sensitivity and extreme reaction to threats, and a hesitant attitude towards opportunities.
- Risk neutral: a willingness to consider the long-term implications of risky decisions and focus on risk-benefit analysis before acting.
- Risk tolerant: accepting of common and routine risks, which may lead to underreaction to more extreme risks and opportunities.
- Risk seeking: a high tolerance for risk taking and a drive to capitalise on risky opportunities, while tending to underreact to threats.

PILLARS OF EMOTIONAL INTELLIGENCE

SELF-AWARENESS

Being mindful of one's emotions, both impulsive and non-impulsive. Consciously studying the negative and positive thoughts and their drivers. Understanding the impact of emotions on one's behaviour and decision-making, thereby knowing one's limitations and strengths.

SELF-MANAGEMENT

Emotional self-control: Keeping disruptive emotions and impulses in check.

Adaptability: Flexibility in handling change.

Initiative: Readiness to act on opportunities.

Optimism: Persistence in pursuing goals despite obstacles and setbacks.

SOCIAL AWARENESS

Empathy: Sensing others' feelings and perspectives and taking an active interest in their concerns.

Organisational awareness: Reading a group's emotional currents and power relationships.

Service orientation: Anticipating, recognising and meeting customers' needs.

During the Covid-19 pandemic, we have seen different risk attitudes at work in governmental and private sector decision-making. In terms of government, many countries defaulted to risk avoidance by being risk averse, the outcome being lockdown. However, some countries, such as Sweden, took a risk-tolerant or risk-neutral approach. Using a country-specific quantitative analysis, policy-makers decided to forgo a total state-enforced lockdown in the belief that the public health system was unlikely to be overwhelmed.

Of course, risk attitudes aren't just determined by a decision-maker's personality type, and neither are they static; the situational and organisational context in which the threat occurs plays a part in risk-based decision-making, so risk attitudes can fluctuate based on these factors. The UK government changed its approach from risk tolerant at the beginning of the crisis to a risk-averse approach as the burden on health systems was projected to drive capacity near to its limits.

Risk appetite

Risk appetite is closely related to risk attitude and is defined as the willingness of a decision-maker to seek risk in anticipation of future benefits. It relates to how much an individual or organisation can 'stomach' the risk or associated uncertainty. Risk appetite is therefore an outcome of risk attitude.

Some companies are inherently risk averse, while some are more willing to take chances. One example of an organisation with a strong appetite for risk is the US company, Moderna Inc. In its efforts to deliver a vaccine for Covid-19 in a timeframe that some considered too short, the company was seeking to capitalise on its strengths by seeking risk in a sector fraught with uncertainty. Moderna's messenger RNA (mRNA) platform injects synthetic mRNA into live cells with the aim of

SYSTEM 1 THINKING AT WORK

"We lost two employees to Covid-19, one of whom I knew personally. It is a deeply saddening loss. We will not be returning to the office any time soon and will be working from home."

The negative emotions associated with a colleague's death have created an "emotional tag" connected with Covid-19. If this person relies on System 1 thinking and does not critically evaluate decisions, then this tag will largely govern their attitude and actions with respect to the lockdown and less weight may be given to other objective factors, such as transmissibility of the virus, case fatality rate, operational risk and so on.

reprogramming cells to generate antigen, which will stimulate immune responses. Conventional vaccines rely on direct injection of pathogen (antigen) to trigger the body's immune response. Moderna's approach can drastically speed up vaccine delivery timelines and reduce costs, but it was an unproven technique; no previous mRNA vaccines had been licensed.

The upside for Moderna was the potential for tremendous rewards if its vaccine was successfully trialled and licensed for use. It appears that Moderna's risk-taking has paid off, as its mRNA vaccine has been authorised for use in the EU, UK, US and

"During the Covid-19 pandemic, we have seen different risk attitudes at work in governmental and private sector decision-making"

Canada so far. Many other organisations are developing Covid-19 vaccines using conventional and mRNA approaches, some of them large pharmaceutical companies, but they were reluctant to promise a delivery date as early as Moderna's. This is a risk-neutral approach, which is informed by the strengths and weaknesses unique to those companies. While Moderna's vaccine was not the first to be approved, its attitude to risk-and objective-setting at the beginning of Operation Warp Speed, set the benchmark for other firms.

Organisational risk appetite is only one of the many things that feed into a decision-maker's own risk response and the decision-making process. For example, different departments and functions within an organisation can also have their own risk appetites – project management or quality departments are often risk averse while marketing or sales may be risk-seeking.

The risk-intelligent decision

Figure 1 demonstrates how all these factors can come together in the course of an individual decision. It represents the process that should occur in the mind of

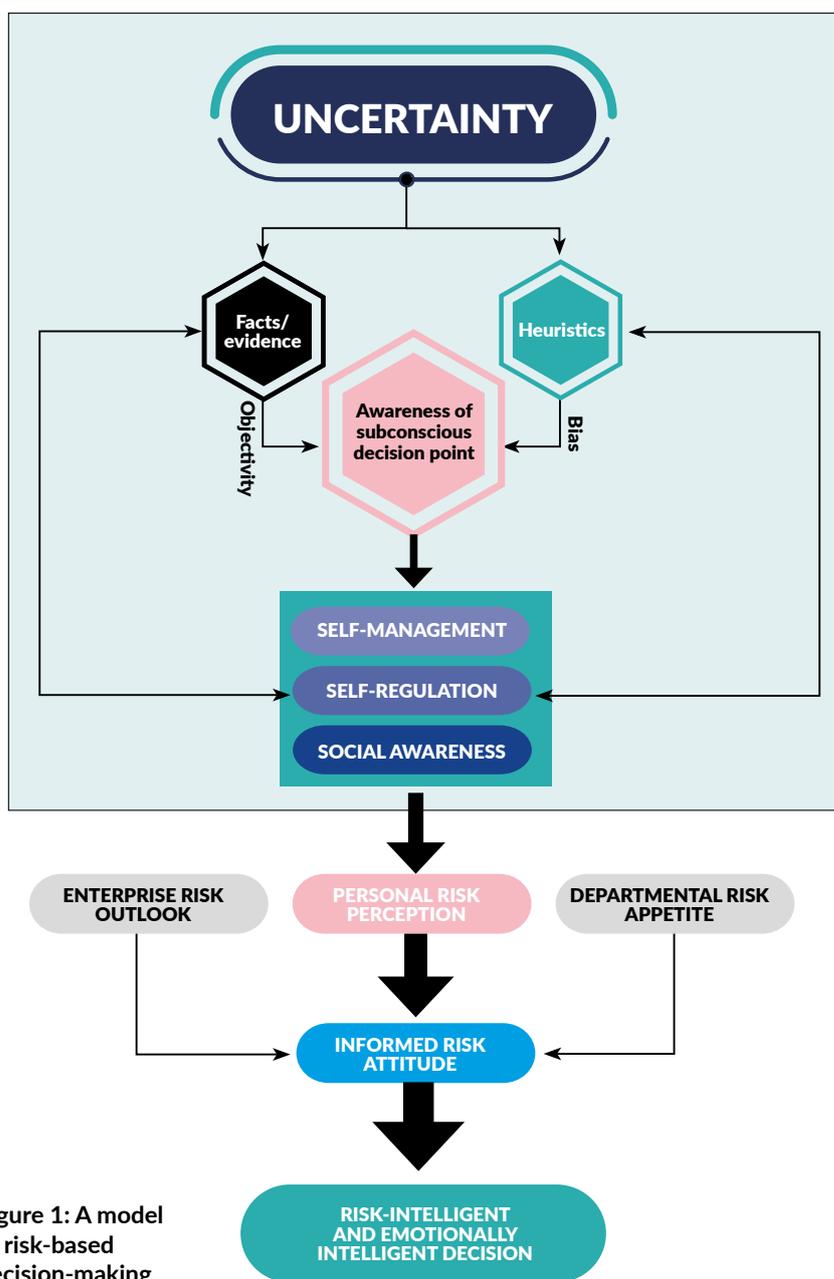


Figure 1: A model of risk-based decision-making

the decision-maker when faced with an uncertainty, and highlights the central role played by emotional intelligence in reaching a risk-intelligent decision.

The ability to overcome biases, challenge assumptions, understand situational context in risk terms and understand organisational and social context are all major aspects where EI can directly help the formation of risk attitudes. The cognitively complex risk-intelligent decision involves assessment and evaluation of probabilities and consequences of multiple decision pathways, which can reduce threats, increase opportunities and create value. The chances of this increases when EI activates System 2 thought processes.

Organisational risk management

In the face of a serious external crisis such as Covid-19, the main aim of a government or an organisation is to reduce the negative economic, human and reputational impact. And, where possible, generate a positive impact by leveraging available strengths, as in the case of vaccine producers, mask manufacturers and auto manufacturers who have been able to retool their factories, and the investment firms who have offered pandemic-related products.

ISO 31000:2018, the industry standard for risk management, asks for many steps, but the following are integral to the risk assessment that precedes the risk response: ►

RISK MANAGEMENT

- Risk identification
- Risk analysis
- Risk evaluation.

The process described in Figure 1 helps remove subjectivity during every step of ISO 31000, and attempts to reconcile the human aspect of decision-making with the organisational risk management strategy.

Risk identification sounds easy, but this foundational step is often prone to errors that are then propagated through the risk management steps that follow, leading to incorrect risk responses. The risk can be identified at the enterprise level, strategic level, operational level, or at the level of product or process. Each risk identified along this hierarchy will have a different and, often, cascading impact. Identification is followed by analysis, which involves assessing the nature and level of risk, and then risk evaluation, which determines its acceptability. Figure 2 illustrates these steps. Risk assessment and its feeders drive the organisational risk response. Risk monitoring and review feeds back into the risk reassessments for updated risk responses. Every step in this cascade, requires critical System 2 thinking.

Correctly assessing a major risk such as Covid-19 is a challenge. Objectivity has always been difficult, but is more so in the era of Industry 4.0, where there is a deluge of information that can often be confusing. The media, especially social media, often presents us with conflicting information and is also continuously vying for our attention and subconsciously shaping our System 1 thinking. A threat such as Covid-19 not only affects our professional lives, but our personal lives as well. Therefore, our risk response may be even more prone to subjective biases and emotional undercurrents.

Secondly, organisations don't normally plan for scenarios like this in terms of

"The challenge when faced with a crisis is to be able to quickly and critically assess risk and provide unbiased, measured risk responses"

risk. There are, of course, emergency management plans but they are reactive. The introduction of risk management into emergency management, business continuity and even quality planning is the better and more proactive approach.

ISO 22301:2019 Security and resilience – Business continuity management systems – Requirements, emphasises business impact analyses and risk assessments, but does not draw out links between the two in detail. The business continuity management system should be integrated into the business processes. The capability of an organisation to continue delivery of products or services despite disruption largely depends on the assessment and response to that disruption in the context of organisational capacity and the hit to that capacity. This is where risk intelligence and risk resilience come face-to-face. The challenge when faced with a crisis is to be able to quickly and critically assess risk and provide unbiased, measured risk responses, thus protecting and creating value for the business.

Actionable guidance for the quality practitioner

Risk-intelligent thinking is the sine qua non of risk management, as every step of the risk management process per ISO 9001

or ISO 31000 involves decision-making. Quality professionals are frequently called upon to take decisions with organisational consequences, and nurturing aspects of risk-intelligent decision-making, as detailed below, can help them make the correct decision, while taking into account multidimensional factors:

- **Understand uncertainty around the decision.** Acknowledge known knows, known unknowns and unknown unknowns.
- **Inculcate fact-based thinking.** Comprehend the available facts and their level of objectivity. Identify missing facts and make an effort to retrieve them. Understand the distinction between raw data, observations, perspectives and processed information.
- **Uncover assumptions behind purported facts.** We are not as rational as we think. Many observations will have some assumptions; understand and question these assumptions to uncover their true nature and validity.
- **Gain self-awareness of your emotional response.** At times, during high-risk decisions, emotions can also be high, defaulting us to System 1 response. Counter that by emotional intelligence. Create a gap between stimulus and response and increase cognitive control to generate capacity and time to observe contents of our own mind.
- **Understand the context of decisions.** Comprehend external and internal organisational environment from a systems standpoint (across business processes, functions and hierarchies), which form the risk context, ie, the context within which the organisation (and decision) is seeking to achieve objectives.
- **Understand risk attitudes and appetites.** As a part of understanding the context,

CRITICAL THINKING AT EVERY STEP

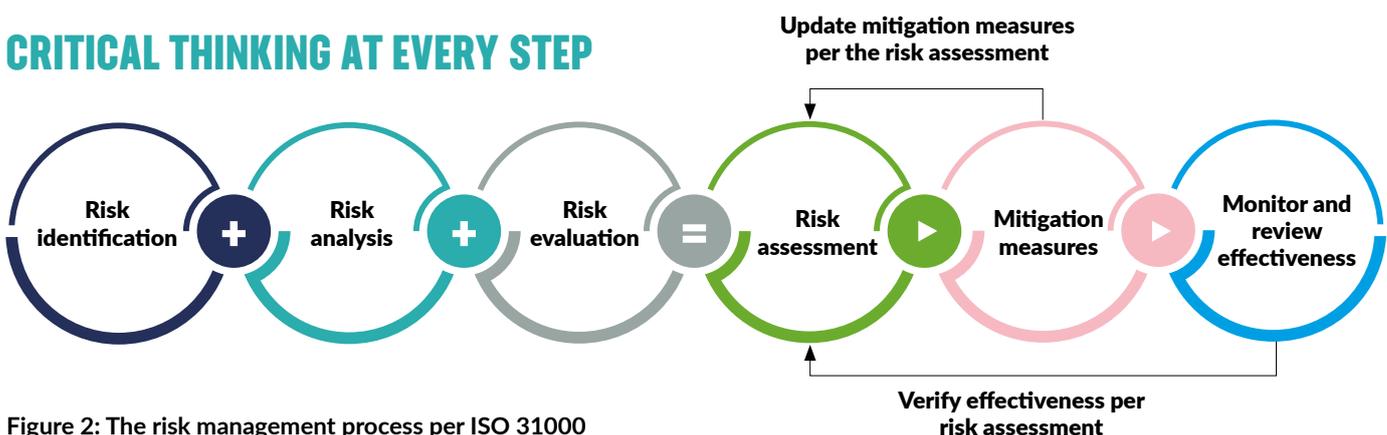


Figure 2: The risk management process per ISO 31000

Figure 3: A risk competency framework



identify stakeholder risk outlook. A risk-averse stakeholder is not likely to agree with a risk-seeking decision. Understand your own risk outlook and be aware of how it is affected by stakeholders.

- **Identify available decision paths and critical parameters for success.** It's likely that more than one decision may apply to the issue at hand. Understand each decision path by analysing consequence of each decision and probability of various consequences of the decision. Choose amongst alternative options.
- **Check for biases.** Use self-awareness to test whether your mental inclination towards the decision is result of a biased reality. Do an assumptions check.
- **Evaluate probability and impact of failure and success of the chosen decision.** Anticipate failure and identify critical points. Use this information to identify preventive approaches to maximise the success of the decision.
- **Consult with stakeholders and gain their buy-in.** Success of decision depends on its acceptability by various stakeholders affected by it.
- **Implement the decision with highest amount of probability of success and potential for organisational benefit.**
- **Monitor the outcome of the decision and adapt dynamically as the context changes** to ensure the consequence of the decision remains as intended.

Proactive monitoring forms the basis of resilience.

- **Control any expected secondary outcomes of the decision and identify emergent risks.** This involves synthesis of available knowledge and organisational framework for rapid risk response.

Holistic risk management requires a systems approach, as shown in Figure 3. An understanding of the following points allow for a integrated end-to-end risk management approach, which will help businesses to survive and thrive and protect investors and jobs.

- **Risk leadership:** Risks cascade from the strategic mission level to the product/service level. Strategic risk-thinking is based on a holistic view of the organisation as a system and uncovers the current and potential hazards to various parts of the system. Risk managed at one organisational level allows for opportunities for value creation at other levels. Mismanaged risks will lead to reduction in value as risks may magnify as they shift through the system across cascading levels. Plan for risk resilience with a systems-thinking mindset.
- **Risk governance:** This refers to the structural framework that governs the organisational risk management activities and related decision-making.

It encompasses policies, procedures, and processes that dictate risk management approaches, methods, and oversight. Its maturity must be assessed and gaps closed.

- **Risk assurance:** In an internal and external context, ensure that risks are continually monitored and reviewed. The external data should feed back into risk reassessments to allow for proactive risk-planning with the sole aim of providing business assurance by ensuring system stability.
- **Practice risk-intelligent decision-making:** Risk management is a complex process and involves prediction and rapid adjustment. Decisions based on biases and assumptions eat at the foundation of organisational risk management process, which in turn cause failures.

Lessons for future risk management

External risks of large magnitude stress the system and always bring to light dormant issues. Some companies, as we have seen in the media, have filed for bankruptcy, while some within the same sectors have been more resilient and have survived. Resilience stems from a thorough understanding of organisational context and its vulnerabilities, and rapid, targeted action through proactive planning. On a deeper level, a system under stress or shock will also reveal the flaws in decision-making processes, and previous decisions will be challenged and may at times prove incorrect. Even a decision that is well thought out is still made with some anticipation of organisational and market behaviour, which may turn out to be inaccurate. Furthermore, a large crisis will create multiple hazards for various arms of the organisation, which will need unique risk assessments and targeted risk responses.

A major learning from Covid-19 is that, in future crises, a simple emergency preparedness or response plan may not be sufficient to ensure business continuity. Risk management should become central to the business continuity plan, which should be founded upon risk-intelligent and critical decision-making from strategic to operational levels. This is vital in the post-Covid-19 world as we begin to ensure our organisations are resilient, flexible and adaptable in face of fast-changing threats that may arise in the future. ■