Understanding and Developing Key Risk Indicators

Audience

This information sheet is intended to assist Commonwealth officials at the following level:

- **Specialist level:** Job role specialists who are required to design, implement and embed an entity's risk management framework. Specialists facilitate generalists and executives to fulfil their risk management responsibilities.

At a glance

Key Risk Indicators (KRIs) are measures and metrics that relate to a specific risk and demonstrate a change in the likelihood or consequence of the risk occurring.

KRIs differ from Key Performance Indicators (KPIs) as they are not concerned with how well something is being done, but rather the possibility of future adverse impact. KRIs provide an early warning to identify potential events that may harm continuity of an activity/project.

There are a number of benefits to identifying and using KRIs:

- **Supporting Risk Assessments -** KRIs help in adding more detail and information to risk assessments, making them more reliable and informative to management
- **Proactive management of emerging risks -** KRIs allow for proactive identification of emerging risks by creating an informative framework in which to scan for what is on the horizon
- **Tolerance levels and thresholds -** KRIs detail at what level a risk is considered important for attention or for direct intervention
- **Trending KRIs -** KRIs can help management track trends in risks to the organisation. This can help to identify areas where greater investment may be needed or where opportunities might lie.

Types of KRIs

Lagging - monitor data retrospectively to identify changes in the pattern or trend of risk / activities. These types of KRIs ensure that the exposure is minimised as soon as practicable to prevent or reduce further exposure or consequence.

Leading / predictive - are used to signal changes in the likelihood of a risk event. They are more likely to aid management in taking action in advance of risks materialising.

Identification and development of KRIs

- Concentrate on high risks
- Identify existing/available metrics
- Understand the frequency of data availablility
- Determine if there are data gaps or metric improvements

- Focus on indicators that may track changes in the risk profile
- Leading indicators will provide a more predictive view of risk
- Ensure the KRIs are measurable, trackable, predictive and informative
- A mix of leading and lagging indicators will provide better risk management
- Determine trigger levels and thresholds, without conradiction to risk appetite

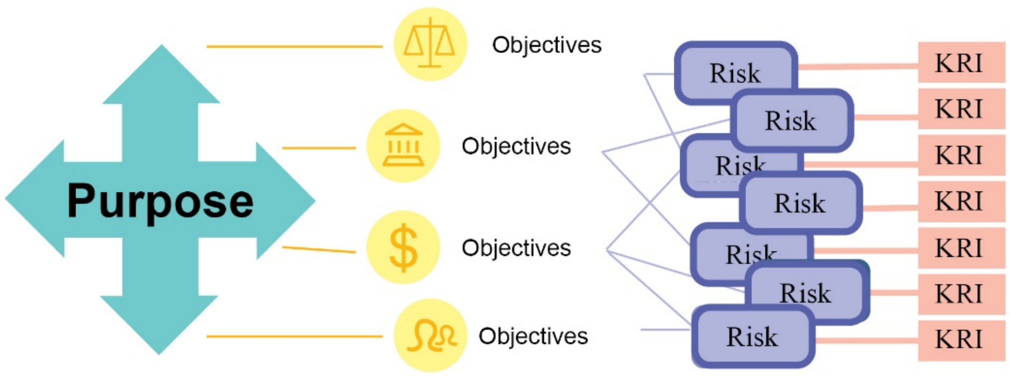
- Determine frequency of tracking
- Escalation and reporting framework should be in place
- KRI reports should indicate trends and movements in risk
- A dashboard format is often the easiest way to track and report KRIs

- Action plans should be created where KRIs are trending toward highest threshold
- Target completion dates for actions should be set and included in reporting

Identifying KRIs that will help realise the entity's strategy and objectives

The determination of effective KRIs starts with an understanding of the entity's purpose and objectives. An effective set of KRI metrics will provide insight into potential risks that may impact the realisation of objectives or may indicate the presence of new opportunities.

The below diagram illustrates the identification of four key objectives aligned to the entity purpose. Linked to the objectives are several potential critical risks that may impact on one or more of the objectives. KRIs have been mapped to each critical risk to reduce the likelihood of the risks occurring and to provide insight and information to Senior Management of any risks that could potentially hinder the achievement of the entity objectives and strategy.



KRIs are most effective when they are:

- Measurable – are the metrics quantifiable e.g. number of, percentage
- Trackable – allowing comparisons to be made over time to provide trending
- Predictable – provide warning signs of potential risk events
- Informative – measure the status of the risk.

KRI thresholds

Prior to monitoring KRIs, levels of threshold should be determined by management that will trigger action. This creates a more pro-active approach to the management of risk through the identification of actions that will reduce the likelihood of a risk event occurring and / or limit risk exposure to within risk appetite tolerances.

KRI thresholds should be reviewed often to ensure they are set so the lower and upper triggers capture events or trends that serve as predictive indicators. The thresholds should not contradict the risk appetite of the entity.

When determining the thresholds and trigger points for KRIs, consider the following:

- Risk appetite and tolerance
- Is there any historical data available on the KRI?
- When does management want to intervene to ensure adequate action and mitigations are put in place?

An example of thresholds:

KRI	Green	Amber	Red
# of key persons voluntary resignations (key person are those identified as successors to senior roles)	<1 per quarter	1 – 3 per quarter	>3 per quarter

In the above example, data would be available from HR systems and action should be taken at the amber trigger to understand reason for leaving, this could be done via methods such as exit interviews, looking at staff engagement survey results or one on one meetings with key persons.

Using past events to identify leading indicators

Reviewing a risk event that has affected your entity in the past is a great way to determine leading indicators that could assist in identifying a similar emerging risk from happening again.

Consider the root causes of the past event, speak to subject matter experts who managed and implemented actions to minimise the impact of that risk and understand the availability of data that could be used to reduce the likelihood of that risk event reoccurring. The closer the KRI is to the root cause of the risk event, the more likely the KRI will trigger pro-active management and action.

Reporting on KRIs

Reporting of KRIs can assist in alerting management to trends that may adversely affect the achievement of organisational objectives. They can identify current risk exposure and emerging risk trends. The frequency of data collection and reporting of KRIs should be agreed and communicated to all staff who play a role in sourcing, collating and reporting on the data. When reporting on KRIs, consider the following:

Availability of data

- What data should you be looking for?
- What data is currently being captured that could be used to measure KRIs?
- What historical data is available to indicate trending when first establishing a set of KRIs?
- How often is data captured and available for reporting purposes?

Data sources

- What data sources are available?
- Have you identified and met with the teams who manage the data sources?
- Communicate with those who manage the data sources to determine the frequency of when data is available and the importance of gathering information within an agreed period of time
- What is the degree of automation for the data source – i.e. manual v interface? (automated data is more reliable and should be used in the first instance to ensure accuracy of reporting)

- Often risks likely to have a significant impact arise from external sources such as economic downturns, legislation changes or interest rate shifts. Think about what external sources of data are available to assist in identifying emerging risks to your entity, for example published unemployment rates.

Data integrity

- The quality and integrity of data will provide an accurate view of current KRI trending to enable effective management of risks.
- How reliable is the available data?
- Is the available data complete, current and concise?
- Is there any requirement for standardisation or tailoring of data? Trending and / or aggregation may lose integrity if standardisation and tailoring of information is required and performed by multiple users.

Reporting of KRIs is beneficial to risk owners, risk managers, senior managers and often Board members and could be included in risk reporting to inform and provide oversight of the management of risk.

It is recommended to report KRIs on a dashboard that will easily highlight the outcome of the KRI and the trending data. The simple use of colour will alert management to areas where attention is required. It is important to remember that KRIs do not manage or treat risk, and could lead to a false sense of security if poorly designed.

Some examples of KRIs and what they could be telling us

1. Number of key persons, voluntary resignations (key person are those identified as successors to senior roles)
   - This KRI could be used as an indicator for human resource/people risks. It could alert management to:
   - Poor succession planning
   - Lack of information/knowledge sharing
   - Key person risk
   - Poor management
   - Poor staff engagement
   - Lack of incentives, rewards or recognition.
2. Percentage of incidents where customer personal data is put at risk
   - This KRI can be used as an indicator for legal/compliance risks, technology risks, fraud risks, reputational risks. It could alert management to:
   - Poor technology/cyber risk controls
   - Lack of adherence to policy or processes
   - Failure to meet compliance obligations
   - Potential scrutiny from regulators or media which will impact the reputation of the entity.
3. Percentage of disaster recovery plans tested in the past 12 months
   - This KRI can be used as an indicator for Business Continuity or technology risks.
     It can alert management to:
   - The possibility of system failures
   - Poor business continuity planning or business impact analysis
   - Slow recovery times
   - Retention of data.

Practical tips

- **Limit the number** of KRIs and focus on high/critical risks. While there may be many KRIs that could be linked to a risk, selecting 2 -3 of the more impactful and informative KRIs will provide more rigour in your risk assessment
- When identifying data sources, **do not limit them to internal sources only**. External data sources could highlight new or emerging risks which could impact your business
- It is better practice to have automated data for KRIs to avoid manual manipulation of data and the risk of human error

- Think about whether the KRIs you identify may be used to **incentivise or motivate** your staff, for example, are there any KRIs that can be linked to performance scorecards?
- KRIs can serve as an **input to determine a realistic risk appetite**. The monitoring of KRIs is an important mechanism by which an entity's management can gain assurance that it remains within its stated appetite for operational risk
- **Review** thresholds and trigger points overtime to ensure they stay aligned with the risk appetite of the entity
- Identified KRIs should inform **trending** over time. Trending can alert management to a deterioration in risk management and adequate action can be put in place
- Present KRIs in a **dashboard** format, the simple use of colour provides a quick visual to management and can highlight focus areas
- Remember that **KRIs do not treat or manage risks**, they are indicators that demonstrate a change in the likelihood or consequence of the risk occurring.

Contact

If you have any questions or feedback in relation to this information sheet please contact Comcover at comcover@comcover.com.au .

Use of this information sheet

Comcover's series of Risk Management Information Sheets are designed to be used as learning resources and are not mandatory.

It is important that entities develop risk management frameworks and systems that are tailored to the needs of their organisation. Entities may choose to adapt some or all of the concepts contained in this information sheet to suit their specific needs or use alternative methodologies.