



The risk canvas

The risk canvas will be best used after attending a one- or two-day training course run by Risk Management Ltd. We are happy to quote for your needs. It has been developed as one way of helping people carry out a risk assessment. It can be used for any risk and, as described here, will work well for major risks to be reported to executive management or officers of an organisation.

The risk canvas helps a group in a workshop to identify:

- key stakeholders to communicate and consult with
- some essential background information about the business environment
- objectives forming part of the risk assessment.

It then enables a simple bow-tie analysis to be carried out, the risk controls to be evaluated and any control gaps identified.

Electronic copy of the risk canvas can be downloaded from the Risk Management Ltd website free of charge and copyright conditions and your [anonymous feedback](#) will be welcome.

Download the risk canvas at:

Give your anonymous feedback at:

Print a copy of the risk canvas

Print a copy of the risk canvas on an A1 sheet of paper. Be sure you have a few pads of 50mm wide x 40mm high Post-it notes and some pens for your workshop.

Identify and evaluate stakeholders in the risk assessment, plan for their engagement

In box A in the top left corner name key stakeholders in the business or undertaking who need to be engaged with as part of the risk assessment. Some will be external stakeholders and some will be workers, managers or “officers”. Rate them for their importance and influence in the risk assessment and then develop a communication and consultation plan for each (these are covered in our short courses). Do you need to invite some of them to help with the risk assessment? If you do, they may trust the results more.

The business environment – carry out a document review

There will be important documents you should read before carrying out the risk assessment. These will contain some information about the business environment of the business or undertaking, the risk you are working on, its controls, and the people or environment exposed to the risk. Identify the documents, record them in box B of the risk canvas, and make sure you read them before the risk assessment workshop.

The business environment – carry out a PESTLE analysis

There are issues in the business environment you should be aware of before carrying out any risk assessment. These can be identified using a political, economic, social, technological, legal and environmental (PESTLE) analysis to help prompt your thoughts more widely. Record them in box C of the risk canvas.

The business environment – carry out a SWOT analysis

The business or undertaking will have strengths and weaknesses and there will be opportunities and threats you might find here in relation to the risk assessment or the business environment. These can be identified using a SWOT analysis and recording the results in box D of the risk canvas.

Identify the business objectives

The above work should have helped you to identify the high-level business objectives and operational or lower level objectives under consideration in this risk assessment. Write the objectives you are working on in box E on the right-hand side of the risk canvas.

Identify some of the key factors about the risk by brainstorming

Use box F of the risk canvas to help prompt Who, What, Why, When, Where, How (5W1H) issues.

Write the key issues in box F.



Detailed risk assessment techniques

Often, bow-tie analysis will give good results and show where controls are weak or where there are control gaps. On our training courses you can learn how to use a range of additional risk assessment techniques that complement bow-tie analysis.

The bow-tie analysis event

Write the event of interest in the “event” box on your risk canvas. DO NOT make the event something like “earthquake”, “death of worker” or “bankruptcy”. An earthquake might be a source of risk that gives rise to a range of indirect or direct causes. Death of a worker and bankruptcy are consequences. Instead, use an event such as “Damage to building”, “Loss of footing” or “Regulator investigation”.

Direct causes of the event

Why might your selected event happen?

To the left of the event is a column headed “Direct causes”. Write on one 50mm wide Post-it note one direct cause of the event. Stick it into the top cell of that column.

Identify another three or four direct causes and write them on more Post-it notes. Stick them into the same column but leave some gaps between each.

Indirect causes

What might make the first direct cause happen? This is an indirect cause of the event. Write it on a Post-it note and stick that in the column headed “Indirect causes”.

Identify indirect causes for each of your direct causes. Write them on Post-it notes and stick them in the indirect causes column near to the direct cause they relate to.

Risk sources

Can you identify sources of risk? Factors that alone or in combination might give rise to indirect causes of risk. They could be factors such organisational culture, natural hazards, economic conditions that you identified using PESTLE or SWOT analysis.

Combinations of causes or indirect causes

Sometimes, direct causes or indirect causes have to happen at the same time and in the same place. When this is the case we use an **AND** gate to show where such a combination might happen.

Sometimes one of several indirect causes can lead to a direct cause. Similarly, one of several direct causes could lead to the event. In such a case we use an **OR** gate to show where this combination might happen.

Work out how the direct causes and indirect causes might combine using **AND** or **OR** gates. Move the Post-it notes until you’re sure you have the right combinations. Write **&** or **OR** on Post-it notes and stick them in the columns of the risk canvas to show where and how these combinations might happen.

Linking them up

Now draw horizontal and vertical lines to link up the indirect causes, **AND** gates, **OR** gates, and direct causes with the event.

Consequences

Some consequences of the event will be direct consequences. They might be death, injury or ill-health of a person. Some other consequences may be “knock-on” consequences.

Write the major direct consequences on Post-it notes and stick them in the “Direct consequences” column. If you can identify knock-on consequences write them on Post-it notes and stick them in the “Knock-on consequences” column.

Now draw horizontal and vertical lines to link the event to the consequences and the consequences to any knock-on consequences. Similarly, link the consequences with the objectives you wrote in box E.



Mark up, name and rate controls

You can mark the risk canvas with solid vertical lines across the horizontal lines to show where there are controls (the things that modify the risk such as a process, policy, device, practice or action). At the bottom of the risk canvas is a box showing types of controls and percentage ratings. Now:

- draw a solid vertical line to show where a control operates
- name the control
- describe what type of control it is
- select the percentage effectiveness of the control
- name the control owner.

Repeat for other controls that are identified in the workshop.

Are there gaps?

Your bow-tie may show control gaps that need to be filled (how the risk could be treated) to make it more acceptable.

Earlier you used PESTLE and SWOT analysis to identify and write down information about the business environment. Does that information suggest what could be done to fill the gaps – to treat the risk? Do you have any other ideas for risk treatment?

If you can see control gaps in your bow-tie and can suggest how they could be filled:

- use a dotted vertical line to show where the treatment could operate
- name the treatment
- describe what type of treatment it is (ie, what sort of control it will be if/when implemented)
- select the likely percentage effectiveness of the treatment
- name the treatment owner (the person who will implement the treatment).

Uncertainties

The definition of risk in ISO31000 *Risk management: principles and guidelines* is the “effect of uncertainty on objectives”. Looking at your risk canvas, have you shown where there is uncertainty? This might be because of how you did the work on the risk or the information that was available to you.

Reporting, monitoring and review

You can now draw your bow-tie analysis in a suitable graphics package and insert it into a risk report.

- Page 1 of your report should summarise the risk and tell managers, “officers” and other key stakeholders (identified earlier) the key features of the risk, including uncertainty and how that may affect objectives.
- Page 2 of your report is your bow-tie: it might be printed on A3 paper.
- Other pages in your report might be details of the risk assessment and how you arrived at your conclusions.

The report now becomes an important record of a risk and how it was assessed. It should be saved for regular review but will also help anyone who is monitoring the risk, or reviewing the activity giving rise to the risk or carrying out an audit.

Outcomes of your work

Using the risk canvas as described here should give you a reasonable risk assessment, including some treatments you or colleagues need to follow up on. Some stakeholders may be satisfied with your work and findings but some may be concerned about the findings or the level of uncertainty and may ask you for better information. Either will be a risk assessment success.

Need help?

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