

Practitioner information

Introduction

This resource introduces learners to some sources of business risk and a simple system for rating risks. It outlines how risk is an essential element of enterprise and highlights some risks associated with scaling up and growing an enterprise. Using the case study, learners consider some risks identified when a potential investor carries out due diligence on a startup and its founders, and formulate responses

Topic links

- Enterprise
- Business risk
- Risk analysis and management
- Scaling up and growth

Suggested learning outcomes

Learners will be able to:

- explain why risk is an essential element of enterprise
- list the main categories and sources of business risk, giving engineering examples
- describe how the success criteria and fail conditions can be used to make an informed stop/pivot/go/grow decision.

Why this topic is relevant for engineers

Risk is an inherent part of enterprise. Learners must understand that this is distinct from how engineers must analyse and manage risks as part of their legal health and safety obligations. Business risk can be underemphasised in business courses, but a clear understanding of risk is essential when planning, building, and launching a successful enterprise.

Delivering the theory: Risk and enterprise

- Before delivering this topic, discuss what learners already understand and associate with the word 'risk', which may draw on their prior learning about health and safety.
- Discuss how an engineering entrepreneur needs to understand and treat these two types of risk differently: managing health and safety risks requires a prudent, risk-averse approach, while seizing opportunities in enterprise needs, conversely, a more risk-tolerant personality. Any engineering entrepreneur needs to understand this distinction and act with prudence or tolerance as required.
- When exploring the table of risks prior to launching an enterprise, learners may draw on experiences of watching 'Dragon's Den', where these risks have often been overlooked, for example, when solving a personal problem is mistaken for a market opportunity.





Practitioner information

Delivering the theory: Sources of business risk

- Note that in the table, health and safety risks are listed as operational risks. Health and safety can therefore be considered as a specific subset of wider business risk.
- Discuss how learners might control each risk to reduce or eliminate it. This can link to your wider health and safety teaching about training, procedures, compliance, and controls.
- External sources of risk are covered in more detail in the resource **11. Strategic analysis for entrepreneurs**.
- It is important learners understand that each type of risk will affect the 'bottom line' as an increased cost or decrease in sales, because most risks will also lead to reputational damage if not managed or eliminated. You may be able to use specific engineering examples to illustrate this, for example, when a reputation for faulty products or poor service becomes widespread.

An enterprise may bring in a new product alongside its current offering and gradually phase out its 'old' products or continue to produce both. For example, Apple today is largely a phone and entertainment company, but it still produces high-performance computers. Pivoting immediately to exclusively producing phones would have been a high-risk strategy.

- The centre of the diagram helps illustrate how decisions to pivot or go can be the hardest to take (unless 'go' is done by default).
 Where a mixture of both success criteria and fail conditions are being met, this requires detailed understanding of how each condition affects the business.
- The online interactive tool for the resource
 11. Strategic analysis for entrepreneurs helps learners explore how analysis guides decisions to stop, pivot, go, or grow.

Delivering the case study: Responses to due diligence

- This case study links to the resource
 9. Funding for startups and scaleups.
 - There is more than one good response and the model answers are just suggestions.
 - The need to recruit complementary skills and qualities is a core issue for founders when operating the business or scaling up, but it is often overlooked.
 - Encourage learners to see the feedback as positive for the enterprise (this has applications in their attitudes to their own coursework feedback).



Delivering the theory: Risk, growth, and success

- Ask learners to suggest why scaling up and growing an enterprise is not 'business as usual'. Reasons can include increased organisational complexity (more layers and more people), communication becoming more difficult, needing to train new employees, or the need to hire more experienced management and technical colleagues.
- A pivot to producing a new product or service is not necessarily an immediate change.