

Practitioner information

Introduction

This resource helps learners consider the reasons why a startup enterprise might want or need to grow and provides a structured process that helps minimise the risks of rapid growth. Learners use an Ansoff matrix to explore how to generate ideas for, and plan, growth in terms of products and markets, before considering how people, strategy, execution (which addresses operations, manufacturing, and finance), and funding are all essential elements to plan.

Topic links

- · Enterprise
- · Products and markets
- · Growth
- · Business strategies

Suggested learning outcomes

Learners will be able to:

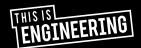
- describe reasons to scale up and grow and the associated risks
- describe the Ansoff matrix and give examples of each type of growth
- list operational areas to focus on when growing or scaling up and explain the importance of each.

Why this topic is relevant for engineers

Entrepreneurs naturally seek to grow their startups to reach financial, personal, environmental, or social goals, but growth comes with risks that can lead to business failure instead of increased earnings, profits, and value. A planned, strategic approach to growth considers how best to serve additional customers, as well as the operational decisions and actions that will scale up the business and support successful growth.

Delivering the theory: Scaling and growing your enterprise

- Begin by discussing reasons why an entrepreneur or business owner might want or need to grow their business.
 These can include internal and external reasons. Share ideas before considering the suggested reasons.
- Discuss what factors might limit natural or 'organic' growth. These can include staffing levels and the capacity of existing machinery, warehouse space, and so on.
- Introduce the idea of planning for growth, to identify the steps needed to reach a future destination. In this way, growth can be thought of as a pathway and process.
- Ensure learners consider each potential business risk (they could suggest more). These risks are the reason why successful growth is a planned, strategic process.





Practitioner information

Delivering the theory: Growth strategies

- This theory sheet works alongside the resource
 15. Branding in engineering, where learners can consider growth in terms of brand extensions.
- Explore the columns and rows in the Ansoff matrix to ensure learners understand each combination of product and market. Learners could consider a familiar consumer brand to help them, such as Apple, Google, Nike, or Amazon, and share ideas for how each brand has reached into new product and market areas over time.
- When reviewing the example, learners can suggest risks and opportunities for each possible growth strategy. This also links to the Innovation and emerging technologies resource in the contextualised engineering resources found at https://raeng.org.uk/fe-innovation where learners consider innovation and market pull.

Delivering the theory: Scaling up

 Learners could consider scaling up in engineering or construction terms: when building a bigger factory, it is not a case of simply making the same building design larger. More structural strength and support is needed, along with more complex wiring

- and piping. In the same way, scaling an enterprise also requires greater complexity and organisational 'strength'.
- Review the diagram to understand how each pillar is needed to support growth. Learners can suggest how the remaining pillars would be affected if each is removed or weak, for example, if the business is lacking the right people.
- Remind learners that a strategy is a plan of action to achieve an aim (see also the resource
 Business strategies for enterprise).

Delivering the case study: Applying the Ansoff matrix

- This case study uses the Growth and scaling for enterprise online interactive tool.
- Guide learners to discuss the startup's current product and technologies: sensing, fine movement, and AI safety algorithms.
 Learners could brainstorm opportunities for applying each or all technologies in new products and markets before using the interactive tool.
- The tool is open-ended: once learners have correctly placed each opportunity within the Ansoff matrix, it is up to them how they will allocate funding to support growth in this area, and learners can justify their decisions to their peers.

