14. Scaling and growth for enterprise

Operations and business development

Business development in engineering

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.

Royal Academy of Engineering

Scaling and growing your enterprise

Growth is a natural goal for any enterprise, so it can deliver increased profits and value for the founders and investors. Enterprises that have social or environmental goals as part of their mission may want to grow to reach more people and to maximise their beneficial impacts.

Growth can happen naturally as demand increases, up to the point at which existing capacity is reached. Beyond this, growth must be planned, especially if it is in response to:

- increased market demand for products or services
- products reaching the end of their lifecycle
- competition from new or improved alternatives
- the need to scale up to be economically sustainable
- investor expectations for future sales and earnings.

However well planned, growth comes with risks:

- Larger companies need more complex operational structures and systems.
- Quality and service levels must be maintained.
- Growing too fast can mean systems, capacities, and team capabilities are unable to match this pace.
- Growing enterprises can face problems with cashflow (the balance of how money flows into and out of the business).
- Scale can create greater sensitivity to changes in markets or the economy.

Growing an enterprise therefore requires a close focus on **risk management** and a clear understanding of what **success criteria** and **fail conditions** will provide reliable feedback and guidance, which the resource **13. Risk and failure in enterprise** explores further.

Check your understanding:

1. List possible risks for the founders, investors, and employees if an enterprise fails (or chooses not) to grow.
2. Give reasons why the costs of scaling up and growing must be carefully planned and managed.

Growth strategies

An enterprise's growth in sales, earnings, profits, and value comes from increasing its outputs.

The Ansoff matrix organises growth in terms of products and markets to identify four possible strategies.

The enterprise can analyse its internal strengths and weaknesses, which affect production and product development, and its external operating environment, which includes its potential markets, to identify the best strategy (or strategies) to pursue.

		Products	
		Existing	New
Markets	Existing	**A Market penetration:** reach more customers within your existing segment.	**B Product development:** create new products for existing customers.
	New	**C Market development:** serve a new market and segment with the same products and services.	**D Diversification:** serve a new market and segment with new products or services.

Example – Sonoric

Sonoric makes high-quality loudspeakers for home audio systems. A strategic analysis of its market environment has identified four possible growth strategies:

		Products	
		Existing	New
Markets	Existing	**A Market penetration:** reduce pricing via online sellers to provide better value.	**B Product development:** develop ultra-high-end models.
	New	**C Market development:** sell to recording studio owners and producers.	**D Diversification:** license the brand name to a headphone manufacturer.

Sonoric must consider the risks and opportunities for each option before planning how it will pursue one or more strategies for growth. This links to how Sonoric understands **brand perception**, its ability to **innovate**, and its access to funding for growth.

Check your understanding:

3. A startup makes lithium battery packs for electric-bike manufacturers. Use the Ansoff matrix to suggest four possible growth strategies.

Scaling up

Regardless of the growth strategy an enterprise pursues, **any business strategy for scaling up and growth asks and answers this question**:

- **What needs to grow within the business, so the business can grow?**

The answer includes four pillars of growth. Each is needed independently but also influences the others.

Growth

People	Strategy	Execution	Funding
More staff Greater skills and experience	Informed by analysis and experience	A consistent focus on delivery, consistency, and quality	To pay for recruitment, training, and investment in resources

Current scale and performance

Like a startup's original strategy, a strategy for growth will address execution across:

Operations (allocating and managing resources)	Manufacturing or digital delivery (what is made, how much, and how)	Finance (pricing, spending and investments)
people and teams sites equipment materials intellectual property	equipment processes capacity inventory outsourcing	product prices overheads marketing research new facilities investor returns

(See resource **8. Business strategies for enterprise**.)

Funding for growth can come from different sources:

- retained profits (profits that are not paid out to shareholders)
- investment from existing or new investors
- loans from banks or personal loans from individuals, for example, the directors.

Growth often happens in stages or phases, with progress to the next phase of investment depending on reaching agreed performance and financial targets. This minimises the risks from growth mentioned in **Scaling and growing your enterprise** (on page 2).

Check your understanding:

4. Why are people the first pillar and how do they feed into strategy and execution?

5. Funding pays for execution but why might it depend on the enterprise proving that it has the right people and strategy to grow?

Case study: Applying the Ansoff matrix

Background

SBM Robotics makes medical robots that allow surgeons to perform delicate eye surgery. Surgeons operate the robots using sensors that detect small hand movements. The robot translates these into even finer surgery tool movements, while patient sensors and AI prevent accidental patient harm.

SBM's investors and leadership team have used the Ansoff matrix to identify four possible growth strategies. The investors will provide £5 million to fund growth. They want to be confident that this will be invested wisely.

Your task

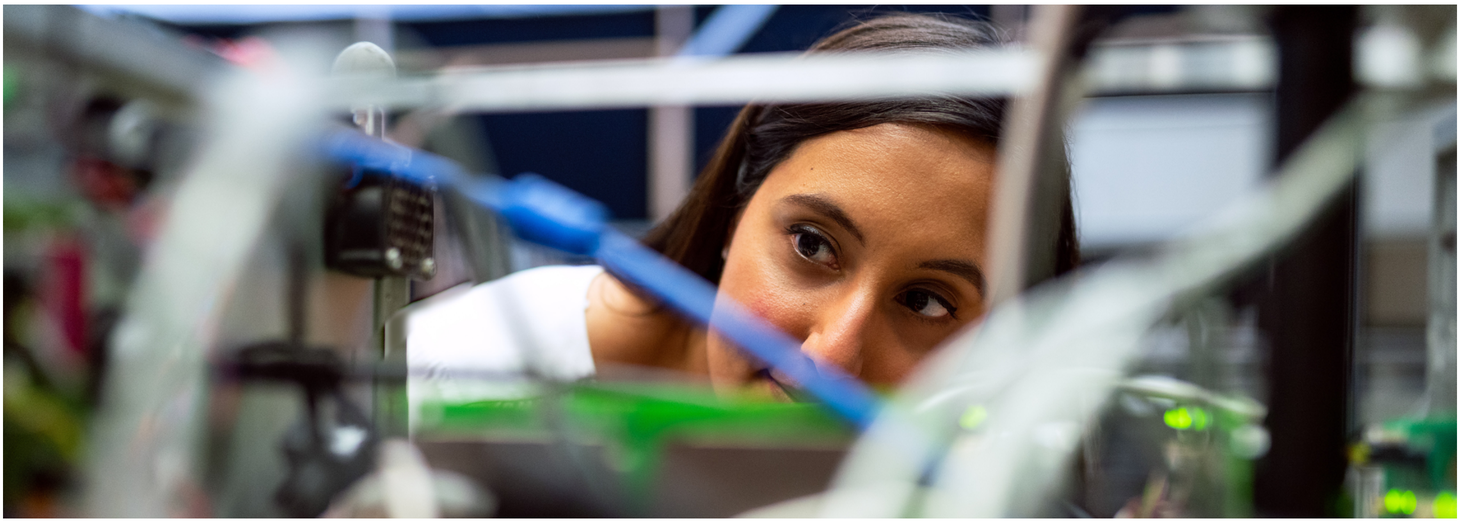
Use the **Scaling and growth for enterprise online interactive tool** to complete the following tasks:

1. Read more about each option for growth and choose a preferred strategy. There is no best answer, but you should be ready to justify your choice.
2. Choose how best to invest the £5 million growth funding across nine areas of business operations. First, broadly prioritise these operational areas. Then, allocate funding to each area. Again, be ready to justify your decisions. Your choices should reflect how each area of operations needs to develop, to deliver your preferred growth strategy.

   At each stage use the 'Save screen shot' function to save images of your choices.
3. On paper or using a computer, write a brief report to justify your choice of growth strategy and how you have invested to grow. Add more detail about the key decisions SBM might need to take, or questions they might need to ask, in your three most important areas for investment.

Extend your learning

- Choose and research an engineering company's product or service range. See if you can identify which products or services are its core or original offering, and which have been added as the company has grown. Suggest, with reasons, whether these additions represent market development, product development, or diversification.



Answers: Check your understanding

These are example answers – your own suggestions may differ.

Scaling and growing your enterprise

1. Founder risks: financial, environmental, or social goals may not be achieved; size may not grow enough to be profitable; may be unable to pay back loans or investors

   Investor risks: may be unable to exit the investment and realise an acceptable return on the investment; exit may be delayed; return may be lower than predicted

   Employee risks: lack of growth and promotion opportunities, risk of unemployment, lower than expected earnings

2. The costs of scaling up must be carefully planned so they are affordable within the investment or loan available (in the short term) and can then deliver enough increased sales and earnings to repay investors or the loan (in the long term) while also increasing profits for the founders.

Growth strategies

3.

Market penetration • Acquire a smaller rival battery-pack producer • Develop new sales partnerships • Reduce prices	**Product development** • Develop new products in partnership with eBike manufacturers, for greater power or range • Develop own eBike range
Market development • Partnerships with other eBike manufacturers who serve other segments • Sell in new geographic regions, eg Europe or Asia	**Diversification** • Battery packs for electric motorbikes or scooters • Large power banks for campers, power cuts, or home energy

Scaling up

4. People are the first pillar because an effective growth strategy is the product of a leadership team with the right skills, qualities, and experience.

5. Funding might depend on the enterprise proving it has the right people and strategy to grow because investors or loan providers will want to minimise their risks and ensure a return on their investment. A strong team and strategy will do this.

Answers: Case study

These are example answers – your own suggestions may differ.

There is no single best growth strategy; however, for each strategy there are three priority areas for investment:

Growth strategy	Priority investment areas	Most important investment area (with reason)
Market penetration	**Process development** Promotion Capacity	**Process development** is most important because SBM wants to be able to lower its manufacturing costs to make its product more appealing to its core market.
Market development	**R&D** Client partnerships Market research	**R&D** is most important as this will drive the development of new models that support veterinary surgeries.
Product development	**Market research** R&D Training	**Market research** is most important because SBM must understand the needs of different specialist surgeons.
Diversification	**People** R&D Market research	Investing in **people** is most important as SBM needs to hire people with deep knowledge and experience of a new customer group: manufacturers.

You may feel that different priorities are more important than the above. What are your reasons?

Explore the interactive

Choose a different growth strategy and explore how your top three priority areas for investment will differ.

Consider why this may be important and how this changes how you allocate your £5 million investment for growth.

Across all four strategies, do some operational areas tend to be consistently more important than others? Why do you think this may be?