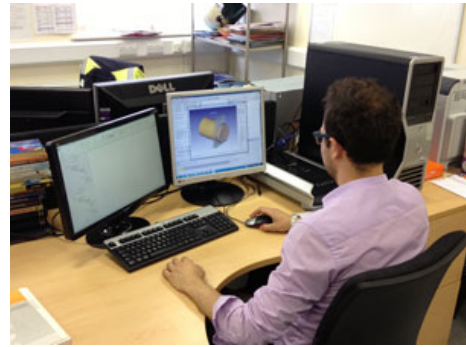


## Teacher guide

### R&D – Sheffield Forgemasters International (SFIL)

#### Where does the lesson fit?

This session could be used in a marketing module, particularly when exploring the product element of the marketing mix.



**Suggested resources & activities** related to Sheffield Forgemasters International and research and development:

- Full SFIL case study
- SFIL MP3 of case study
- Research and development PowerPoint
- SFIL crossword
- SFIL word search

#### Suggested timings for the session

5 mins	Starter e.g. SFIL crossword
5 mins	Use the research and development PowerPoint to discuss the topic
5 mins	Read the case study
10 mins	Questions
30 mins	Task – product development activity
5 mins	What have you learned?

#### Answers to questions

1. What is research and development?  
Research and development (R&D) is the scientific research and the technical development involved in developing new products or processes.

2. Describe the stages within the development process at SFIL.
  - Idea generation (through research)
  - Idea screening & concept testing
  - Evaluating ideas against the client brief
  - Prototypes made & tested (may be discarded, adapted or adopted)
  - Successful product is produced for the customer
  
3. Explain the challenges of R&D.

Challenges of R&D include:

  - the high costs
  - the long timescales
  - the high risks
  
4. Analyse the reasons for carrying out new product development.

NPD is carried out for a number of reasons:

  - To maintain competitive advantage
  - To compete with rival products that are already on the market or soon to be released.
  - To replace declining products. This is particularly important in a technology driven industry where change and advancement occurs rapidly.
  - To add to the current portfolio and therefore build sales and market share.
  - To fill a gap in the market

**What have you learned?**

Expected learning is likely to include:

- Definition of R&D
- Purpose of new product development
- Stages of research and development
- Costs and benefits of R&D
- How firms deal with the challenges of R&D