



# ***Higher Design & Manufacture***

*The Design Team*

# *Learning Intention & Success Criteria*

- *I am...*

- ★ *Developing my understanding of the design team and it's members*

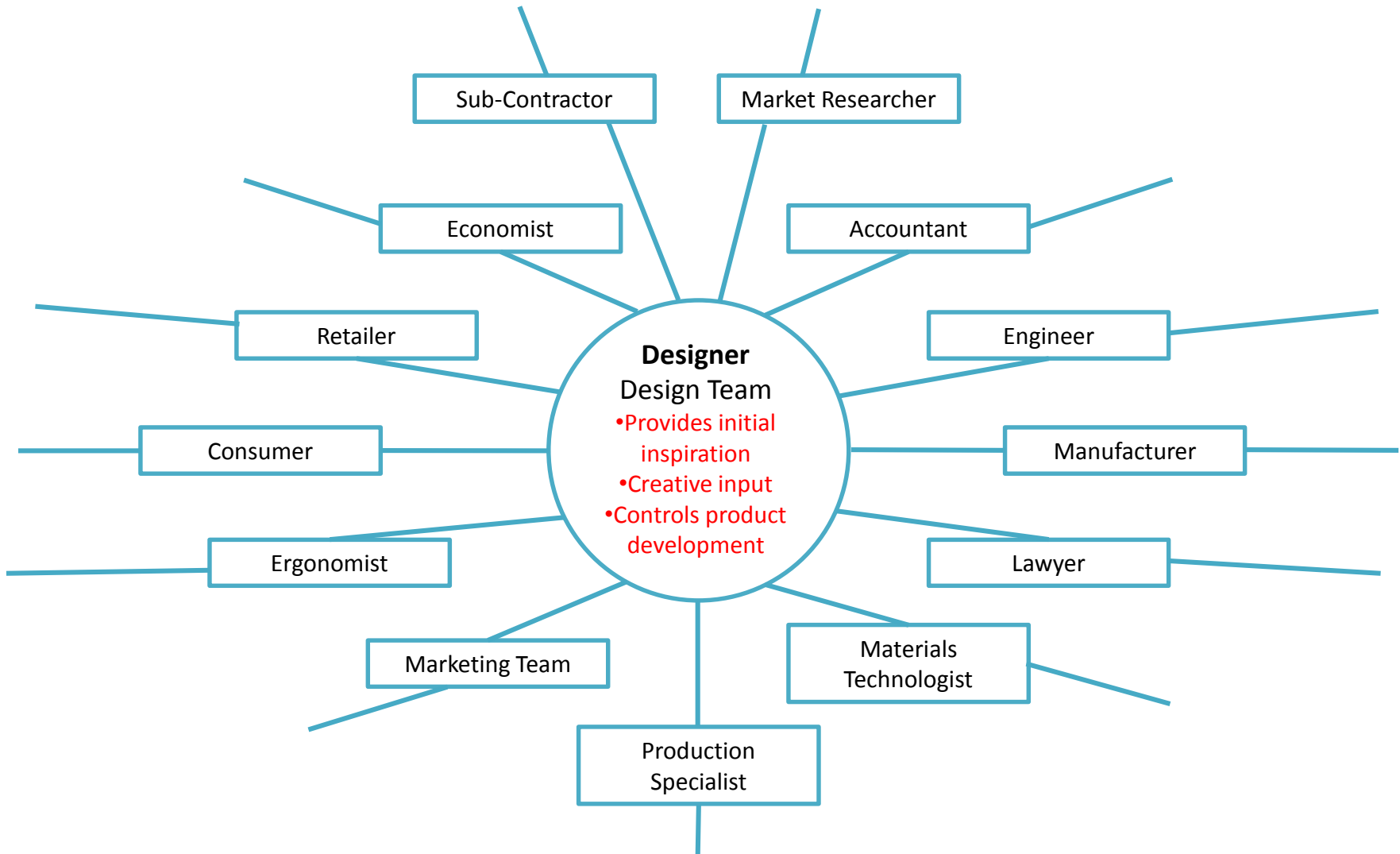
- *I can...*

- ✓ *Name the various experts who contribute to the design team*
- ✓ *Distinguish between the different roles involved in the design team*

# *The Design Team*

- Products today have to **compete in very wide market places** and most commercially-produced items are **mass produced**.
- They are usually the result of quite extensive developments in **materials, systems technologies** and **production methods**.
- The more complex nature of modern products has made it impossible for any single designer to work on their own.
- Most designers now work as part of **bigger teams**, liaising with other experts from time to time.
- *The diagram on the next slide gives an indication of the type of experts who may be asked to contribute to a design team.*

# *Design Team Members*



# *Designer*

- Provides initial inspiration
- Creative input
- Controls product development

# *Market Researcher*

- Conducts research
- Provides feedback on needs and wants of consumers
- Provide feedback on consumer views
  - Pricing
  - Trends
  - Projected sales numbers

# *Accountant*

- Monitors costs during all stages
- Set caps on spending
- Ensures product is costed at price public is willing to pay

# *Engineer*

- Tests various aspects of the product's function
- Ensures product functions:
  - Safely
  - Efficiently



# *Manufacturer*

- Provides information on how a product best be manufactured
- Offers advice to design team as to how:
  - A product can be altered
  - Allow it to be manufactured economically and efficiently

# *Lawyer*

- Ensures legal aspects of design, production, marketing and retail comply with legislation

# *Materials Technologist*

- Provides information on all aspects of materials:
  - Properties
  - Manufacturing methods

# *Production Specialist*

- Provides information on all aspects of a product's production:
  - Rate
  - Volume
  - Best production system

# *Marketing Team*

- Develops marketing strategies to promote the product
- Use market information to help publicise with focus on the 3 Ps:
  - Price
  - Promotion
  - Product

# *Ergonomist*

- Provides information on all aspects of ergonomics:
  - Anthropometrics
  - Physiology
  - Psychology
- Information on e.g. gender and age from market researchers to a specific target market

# *Consumer*

- Provide feedback to designers, marketing team, researchers etc. on all aspects of the product
- Feedback is vital at all stages of the development

# *Retailer*

- Provides feedback on:
  - Sales
  - Likely to sell or not
  - Success insight



# *Economist*

- Monitors market trends
- Predicts how strong the economy will be
- Work closely with accountants to ensure final product is economically viable

# *Sub-Contractor*

- Provide expertise and services in a range of different fields
- Ensure the product is manufactured as efficiently as possible

# *Balancing Roles*

- For products to be successful on the marketplace it is important that all of those involved in the design:
  - Play their part
  - Contribute effectively
- Failing to do this will result in products that are unlikely to be successful

# *Balancing Roles*

- The people who influence design can be split into three groups, based on the role they have to play in the design of products.
  1. Creative Thinkers
    - Are involved in the development of the product
    - From the initial concept through to the marketing strategy used to promote it
  2. Technical Specialists
    - Are involved in aspects of the product's material selection and manufacture
  3. Business Specialists
    - Are concerned with the commercial, economic and marketing aspects of the product

# Task 1

- For each of the design team members discussed in this lesson, sort each into the categories below:

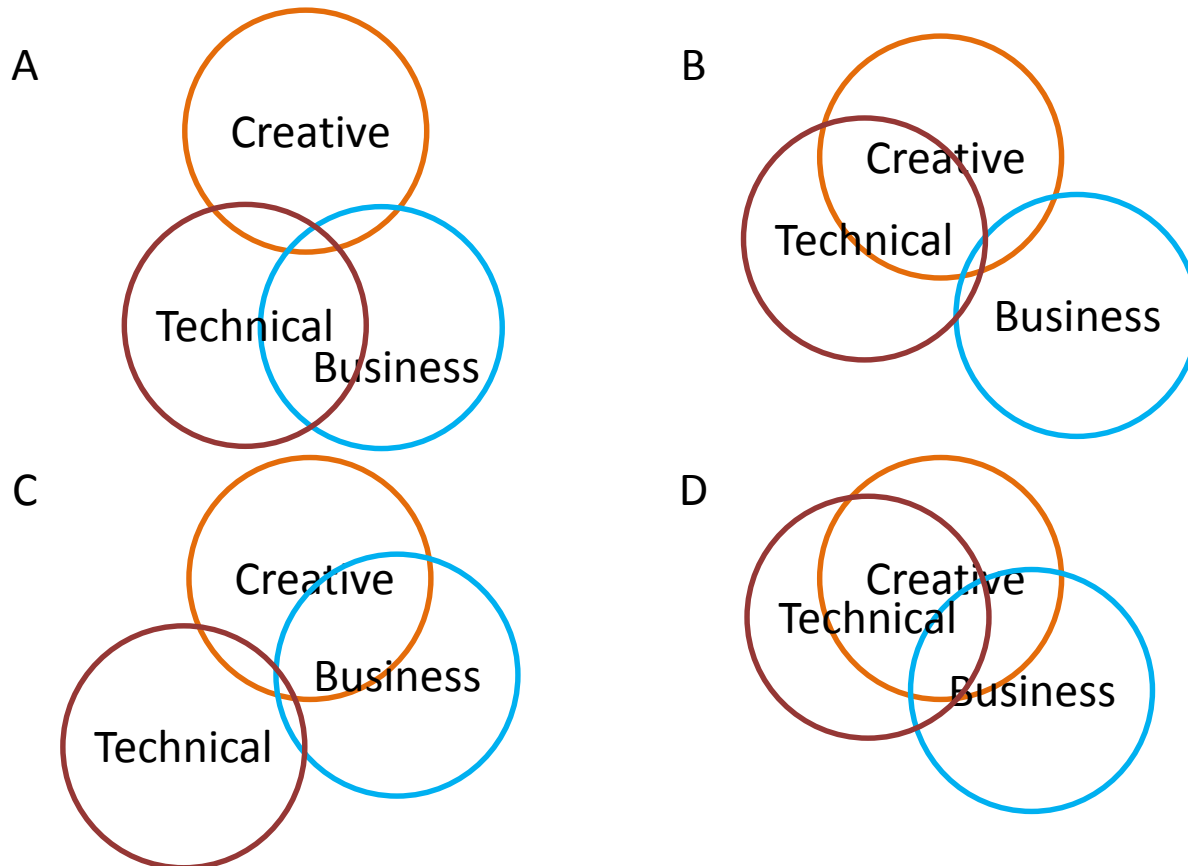
Creative	Technical	Business
<b>Designer</b> <b>Marketing Team</b> <b>Ergonomist</b>	<b>Engineer</b> <b>Manufacturer</b> <b>Materials Technologist</b> <b>Production Specialist</b> <b>Sub-Contractor</b>	<b>Market Researcher</b> <b>Accountant</b> <b>Lawyer</b> <b>Economist</b> <b>Retailer</b> <b>Consumer</b>

# Task 2

- A range of inputs is required is a design is to be successful.
- If the balance between inputs is skewed towards any one particular area, there is an increased risk of product failure.
- Creative, technical and business input is likely to be required if a product is to be successful.

# Task 2

1. Describe the impact of the balances shown below:



2. Which balance do you think is best for a product?

# Task 2 Answers

- A
  - Good balance between all three.
  - Creative input could have been stronger resulting in a design that has considered the technical and business aspects to the detriment of the creative
  - End product may be technically very good and marketed well with a good budget, but be ordinary or uninspiring
  
- B
  - Technical and creative combined well, resulting in a product that is innovative and technically good
  - Business side letting the product down, resulting in potentially late to the marketplace or out with budget
  - Potential inflated retail cost to try to regain some money from going over budget
  
- C
  - Creative and business have combined well but have been let down by the technical side
  - Finished product is likely to be innovative and well marketed but is likely to have technical failings
  - May sell well initially, but there might be an increased number of returns or a recall as a result of technical faults that came to light after the product launch
  
- D
  - Best balance of inputs resulting in an innovative, technically advanced product that has been well managed through all stages
  - Product is likely to be marketed well, resulting in good sales figures and a low number of returns due to any faults.
  - Risk is potentially that the product is too creative and technologically advanced that it is not what the market requires