Chapter 43
Technology in production

1. The impact of new technology in the primary sector

For example, The application of drones. They can be used to help farmers with water and disease management, and to develop better planting strategies.

2. The impact of new technology in the secondary sector

: Production has become more capital-intensive in many industries. This means that more machinery is used in production instead of other resources such as labour.

2.1 Computer aided design (CAD)

: use of computers to design products

: This allows a business to produce accurate drawings, which can be viewed in 3D and altered cheaply and quickly.

2.2 Computer numerically controlled machines (CNCs)

: Machines that carry out the instructions fed by computers

: Machines can be programmed by computer to carry tasks such as cutting, milling, drilling, sewing and printing.

2.3 Computer aided manufacturing (CAM)

: where computers link and control the design and production of goods in manufacturing.

2.4 Computer integrated manufacturing (CIM)

: Involves using computers for the entire production process. In a CIM system, functional areas such as design, planning, purchasing, cost accounting, stock control and distribution are linked through the computer.

3. The impact of new technology in the tertiary sector

- In financial services (eg. Banking), many transactions can be carried out online. Automatic teller machines (ATMs)
- In marketing, the use of information technology (IT) has made market research easier. The gathering, processing and presentation of market research easier.

4. Balancing the cost, productivity, quality and flexibility of technology

: The financial cost of purchasing, installing and maintaining technology can be very high. Robots, CNC machinery and other high-tech equipment are often very expensive and businesses often need to borrow or raise funds to make the investment.

: There is also the human cost to consider. Introducing new technology often means making people redundant; this is also expensive and can disrupt the workforce.

To conclude, investing in new technology is risky and businesses have to evaluate the costs, productivity gains , the impact on quality and loss of flexibility before going ahead.