

FACTFILE: GCSE DIGITAL TECHNOLOGY

Unit 1 – DIGITAL DATA



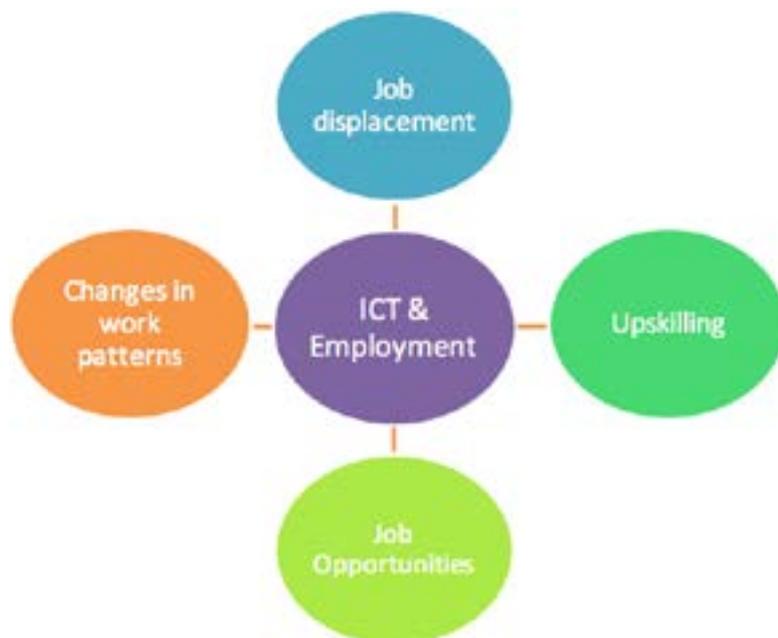
Fact File 20: Changes in employment opportunities, skills, requirements and work practices

Learning Outcomes

Students should be able to:

- Describe the impact of digital technology on employment including:
 - Increased job opportunities in the digital technology and computing sector;
 - Job displacement;
 - Changes in work patterns;
 - The need for upskilling.

The introduction of ICT in the workplace over thirty years ago had a huge impact on the way people work. While initially ICT was feared by many who thought they would lose their job to a robot or computer, it also quickly became apparent that the introduction of ICT created a lot of opportunities as well.



Job opportunities

The introduction of ICT led to the introduction of new job roles such as programmers, software engineers, ICT technicians, network managers and ICT consultants. As ICT has evolved so too have the job roles. Web design, app development and social media have opened up opportunities for new job roles in the ever growing ICT sector.

Job displacement

Some job roles completely disappeared with the introduction of ICT in the workplace. For example, in factories where human workers once worked on the factory floor, their role has been replaced by the use of computer controlled robots. Clerical workers such as filing clerks who once spent a lot of time filing paperwork are no longer needed as they have been replaced by databases or spreadsheets.

Changing working patterns

Traditionally the working day for many employees was 9-5. However, the introduction of ICT meant that many organisations could now operate 24/7. For example, robots used on the factory floor in a manufacturing organisation can operate for 24 hours a day, 7 days a week. This led to shift work as human employees were needed to supervise and maintain the machinery. Shift work could involve working during the evenings, at night and/or at weekends. Another industry which operates 24 hours a day is call centres. We as a society expect to be able to reach someone at 3am if we lose a phone or bank card, therefore employees work nightshifts to ensure that someone is there to answer their call.

Portable devices such as laptops, tablets and smartphones mean that employees can now carry out their work at home or even on the road. It also means the employees are more easily contacted – even outside of the normal working hours. For some employees, portable devices have blurred the line between their work and home life as they feel compelled to answer a phonecall or email even though they aren't at work.

Teleworking

Working from home using ICT is known as **teleworking**. Through the use of devices such as laptops, smartphones and PDAs, employees can keep in touch with their workplace via the use of email, messaging, video conferencing and the internet. Many employees can now also log into their employer's intranet from home and access documents and files.

Activity

Think about the impact on both the employee and the employer of teleworking and write your answers below.

Advantages of the employer	Disadvantages for the employer
Advantages of the employee	Disadvantages for the employee

The need for upskilling

Organisations spend a lot of money on the latest hardware and software to improve their efficiency. However this is wasted money unless they train their employees to use the equipment and the software effectively. ICT is constantly evolving and changing with new hardware or newer versions of software being released. Therefore employees need to be constantly retrained to update their skills.

Exam Questions

1. The use of computer systems has provided new and changing job opportunities. Describe two ways in which technology has affected job opportunities in the ICT and computing sector (6 marks)

June 2015 Question 7

2. The statements below are about teleworking. Write TRUE or FALSE beside each. The first one has been done for you. (3 marks)

June 2013 Question 3(c)

Teleworking is the use of the telephone to make sales to customers.	FALSE
Teleworking allows employees to work flexible hours.	
Teleworker activity is more difficult for managers to monitor.	

3. Describe how the use of teleworkers will impact on the company in terms of:

- Recruiting employees
- Training employees
- Expenses and costs (6 marks)

June 2013 Question 3(c)

Bibliography

http://www.teach-ict.com/gcse_new/work_employment/employment_ict/home_employment.htm

CCEA ICT for GCSE Textbook (Matthewson, Lynch, Debbadi) Page 248–250

