Chapter 5 – The effects of using ICT

The key concepts covered in this chapter are:
• The effects of ICT on employment
• The effects of using ICT on working patterns
• Microprocessor-controlled devices in the home

Vocabulary:
Shop work, human resources, payroll, labour-saving devices, smart fridges

• Describe the advantages and disadvantages of the above devices
• Describe the effects of using ICT as a workforce
5. The effects of using ICT

**Manufacturing**
Robots have replaced human workers in many areas of manufacturing, for example welding car bodies, spraying metal items with paint, assembling items and creating circuit boards.

**Shop Work**
Online shopping has reduced the need for high-street shops, leading to a loss of staff.
5. The effects of using ICT

**Banking**
The introduction of the ATMs and online banking has led to the closure of many high-street branches.

**Office Work**
Spreadsheets, word processors, and databases have taken over many of the tasks carried out by office staff.
The use of computers and microprocessors has revolutionised many aspects of how we work. From offices to manufacturing, every task humans do has been affected in some way by electronic devices. All in positive and negative ways.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Easier to edit, change, update information</td>
<td>If devices are down or computer crashes</td>
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<td>information may be lost</td>
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<td>Cheaper labour and benefits pay-outs</td>
<td>Job loss, unemployment, carer shortage</td>
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The introduction of ICT whether to improve efficiency, reduce costs or improve safety, has led to redundancies in many areas of industry and commerce.

5.1.1 Negative effects – job losses

Office Work
Day to day tasks in a company are presently carried out manually by people in different department:
- Administration
- Human resources
- Payroll

Spreadsheets
Has revolutionized payroll, monthly salaries, wages. There is no need to calculate salary because it's all typed out on a pay slip.
Graphs / charts / averages

Word processors
Easier to modify and update documents. Documents are stored on hard disks, or a solid state storage device in electronic formats.

Databases
Human resources, has also been changed by the introduction of computers and software. Tasks such as updating personal data eg. Salaries, address, phone number, department, etc.
5.1.1 Negative effects – job losses

Manufacturing

Job losses due to ICT have affected industry even more than in the office environment. The introduction of robots, for example, has revolutionized how items such as cars are produced.

- Spraying the bodies with paint
- Assembling all the body parts
- Assembly of the engine and transmission
- Fitting the widescreens