# Video transcript

**Video 3.0: Reading and constructing an information flow diagram**

Information flow diagrams are the third type of diagram we will look at.

Information flow diagrams (or IFDs) are used to show information flows within an organisation.

IFDs are easy to confuse with Data Flow diagrams (or DFDs). DFDs concentrate on the inputs and outputs of a system to and from external entities. IFDs focus on the internal flow of data inside an organisation; however they may also show the flow of information to external organisations.

Information flow diagrams are less formal that DFDs or flow diagrams.

There are no rules about the shapes of the boxes which make up the diagram. Information flow diagrams are made up of boxes which represent the people, devices or departments which are   
the source or destination of the information flows and the arrows that represent the information flows themselves.

The main skill you need to develop, as with other drawing techniques, is to be able to draw an information flow diagram which accurately reflects a written description you might get in an exam question. Let’s look at an example.

A supermarket stock control system works like this.

Items customers have purchased are scanned at the checkout.

The checkout sends details of the items purchased to the stock control computer.

When stock control falls below a certain level, the stock control computer sends an order for more items to the supplier.

The supplier sends the items to the supermarket and sends an invoice to the supermarket accounts department.

As with the other drawing techniques, it’s worth annotating the scenario to help make it clear before you start on the drawing.

With an information flow diagram, the two aspects of the scenario you need to identify are the people, devices or departments you will put in the boxes and the information flows between them.

In this scenario, the people, devices and departments are:

* the supermarket check-out
* the supermarket stock control computer
* the supplier, and the supermarket accounts department.

The information flows are details of items purchased (from the checkout to the stock control computer).

Orders for new items (from the stock control computer to the supplier) and invoices (from the supplier to the accounts department).

Now we have identified the parts of the diagram, we can draw it. We can add boxes for the supermarket checkout, the supermarket stock control computer, the supplier and the supermarket accounts department.

Then we can add the arrows labelled items purchased, orders and invoices.

Note that the diagram is quite simple. The focus is on information flows only. We don’t have to worry about how the stock control computer works out if it needs to order new items, or how the supplier processes the order. That kind of design could be done with a flowchart.

To demonstrate the difference between an Information System diagram and a flowchart, let’s draw a flowchart to show the processing steps that the stock control computer takes to decide if it needs to order new stock.

The flowchart starts with the Start symbol as always.

Next the item that has been purchased is input, so an input/output symbol is used.

Then the system calculates the current stock level; this is a processing step.

The following step is a decision step: is the stock level low? If the answer is no, there is nothing to do, just go to the end of the process.

If the stock level is low, then an order is output.

At the end, of course, there is a Stop symbol.

What about a DFD? How would you model this system with a DFD? Remember a level 0 DFD shows the data flows between the system and the external entities. The supermarket control system is the box in the centre. But what are the external entities?

The supplier is clearly one.

They are sent an order and respond with an invoice.

The other external entity is the customer who buys the items. The item details, in terms of the barcode which is scanned, is the input to the system.

So, the final DFD looks like this.

In summary then, we have looked at information flow diagrams. These are simple informal diagrams which show the flow of information between people, systems and departments in a scenario. We compared these to flow diagrams, which are more formal and have defined shapes which must be used to represent the different stages in a process and we drew a flow diagram   
for the stock control process of selecting if new items need to be ordered. Finally, we drew a   
level 0 data flow diagram which shows the input and output to and from the system and the external entities.

To finish, just a few tips on drawing these diagrams in the exam.

Where an exam question wants you to draw a diagram it will always start with the word ‘draw’.

Read the question carefully and check what type of diagram it is asking for. An information flow diagram, a flowchart or a level 0 (or top level) data flow diagram.

Before you dive in and start drawing the diagram, highlight the main points in the scenario described in the question and draft out a sketch of the diagram.

There are no marks for artistic ability, but your diagram should be clear and readable. Especially with flowcharts it must be clear what shape you are using for each step.

Finally, keep the diagram simple. You won’t be expected to draw a complex diagram.