

## Week 1 - Rich Pictures

An emphasis of this subject is learning through understanding rather than learning through memorisation. So:

1. What is an understanding?
2. How can understanding be achieved?

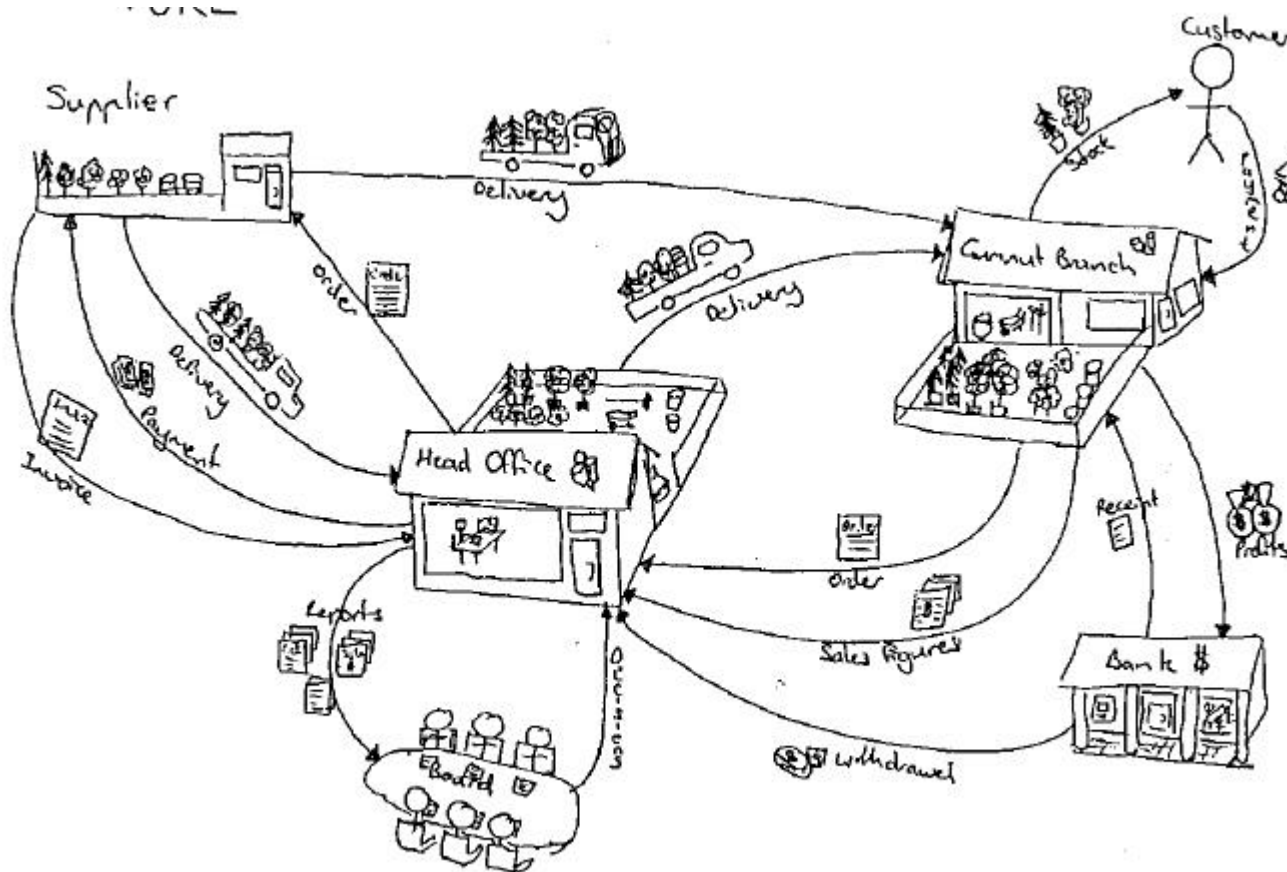
Before we can understand the IS development topics in this subject we need to consider these two questions. A diagramming technique used in some information system development projects and called rich pictures will be used to answer these questions and to assist our learning in IS Development.

### What is an understanding?

Students describe an understanding in many ways, for instance:

- having a clear picture
- completing the puzzle
- having one's own version of the subject material
- having a background to which new new subject material could be linked
- being able to explain a concept to others off the top of the head
- knowing how and when to apply a concept to new situations

An understanding can also be considered in a logical way. Take for instance an understanding of the way a plant nursery company operates, in particular a company with a central head office and regional branches. A possible rich picture of the operations of a plant nursery company is below.



We can see that an understanding of the operations of the plant nursery comprises:

1. knowing what parts make up the company (eg. the company management board, the suppliers)
2. knowing about each part (eg. knowing about the workings of management boards)
3. knowing about the links between the parts (eg. the plant supplier is related to the head office by invoices, orders and payments)

An understanding of any concept has the same three components: the parts, the detail of each part and the relationships between the parts.

### How can understanding be achieved?

An understanding can only be achieved through an intention to understand, that is an intention to become familiar with the parts, the details of each part and the relationships between the parts.

An intention to memorise some subject material means that an understanding cannot be achieved. If the intention of the learning process is to memorise, no effort is made to link together the parts. An understanding is not possible! Memorised material is forgotten shortly after the exam and is, therefore, of little use in our careers. An understanding is for a long time. Given that the parts of an understanding are related, a single prompt from the environment can recall our understanding of a concept.

An understanding uses and builds on what we already know. For instance, a component of the plant nursery company is the Bank. We can use our personal experiences of Banks to provide the detail of the Bank part of the plant nursery. Another part of the plant nursery company is the Board (the management board). We may have learnt about management Boards in a subject like Introduction to Business for instance or Organisational Behaviour. Our knowledge from other subjects helps build

our understanding of the plant nursery company. We may have been a customer at a plant nursery which may give you insights into other parts of the plant nursery company and the relationships between the parts.

In order to learn with understanding we must link together the various components of the subject matter, and relate them to ideas from other topics and to your own experience. Rich pictures provide a diagrammatic way of developing and representing an understanding. They can be used for a number of specific purposes, such as to:

- summarise ideas from a textbook that you want to understand thoroughly
- organise sets of ideas that are complex and difficult to understand
- clarify passages of text that are not well written
- summarise lecture notes
- organise ideas for writing essays or making speeches
- review for examinations
- develop your understanding
- check on your understanding

Rich pictures can help us identify strengths and weaknesses in understanding.

Drawing a rich picture of a particular concept or idea involves the following steps:

1. Identify the main ideas, terms, parts of your understanding.
2. Use icons to represent your understanding of the ideas, terms, parts.
3. Draw lines between terms that are related, and draw or write on each line an icon or phrase identifying the nature of the relationship.

Drawing and describing the relationships can be part of the understanding process. If we cannot immediately see the link between two parts, we need to think about it.

ANYTHING can go on a rich picture. This week's workshop will provide more examples and a chance to draw our own rich pictures.