CSE1204 – Information Systems 1
Tutorial 7 – Process Modelling: Data Flow Diagrams

Tutorial Objectives:
- to develop an understanding of the use of data flow diagrams for process modelling
- to practise data flow diagramming skills

Tutorial Task:

Draw a set of levelled data flow diagrams for the following situation:

At Acme Trading Pty. Ltd. customer orders for goods are obtained by salespersons and forwarded to the main office by phone or fax. At the sales office a sales clerk records each order on a register, allocating a unique order number. The sales clerk verifies each order for completeness and checks any omissions with the sales person. Only valid orders are registered. When customers decide to cancel orders, the sales order clerk is notified by the salesperson and flags the order in the register as cancelled. A cancellation advice is sent to the despatch clerk.

The despatch clerk is responsible for filling the orders and either retrieves the goods from the warehouse or purchases the goods from a supplier if the warehouse is out of stock. Orders are always filled from warehouse stock if possible. If only part of an order can be filled, it is despatched to the customer and the rest of the order despatched later when available.

Goods are obtained from the warehouse by sending a stock request notice. The storeman retrieves the goods and sends them to the despatch clerk with the completed stock request notice. If the stock level falls below the re-order point a stock purchase request is sent to the purchasing clerk. If the goods are not available, an incomplete stock request notice is returned to the despatch clerk. The despatch clerk then notifies the purchasing clerk of an urgent need to purchase the particular goods.

The purchasing clerk acts on the advice received and will select an appropriate supplier. A purchase order is raised and sent to the supplier and a copy is filed in the purchase order register. After the supplier delivers the goods, the accompanying delivery invoice is checked against the purchase order and a cheque is issued to the supplier. Advice about goods delivered is sent to the despatch clerk.

The despatch clerk forwards the goods to the customer as soon as possible and updates the order register. If the order has been completed, the customer is invoiced. When customer payments are received, they are checked against a copy of the invoice.