INFS2001 – EXAM details

- Time: 2 hours (+ 10 mins reading time)
- Closed book (+ PhonETIc case study)
- 3 Questions (with sub-questions)
  a) Systems Mapping and Documentation
  b) Designing and Processing Data
  c) Make versus Buy (Acquiring and Implementing Information Systems)

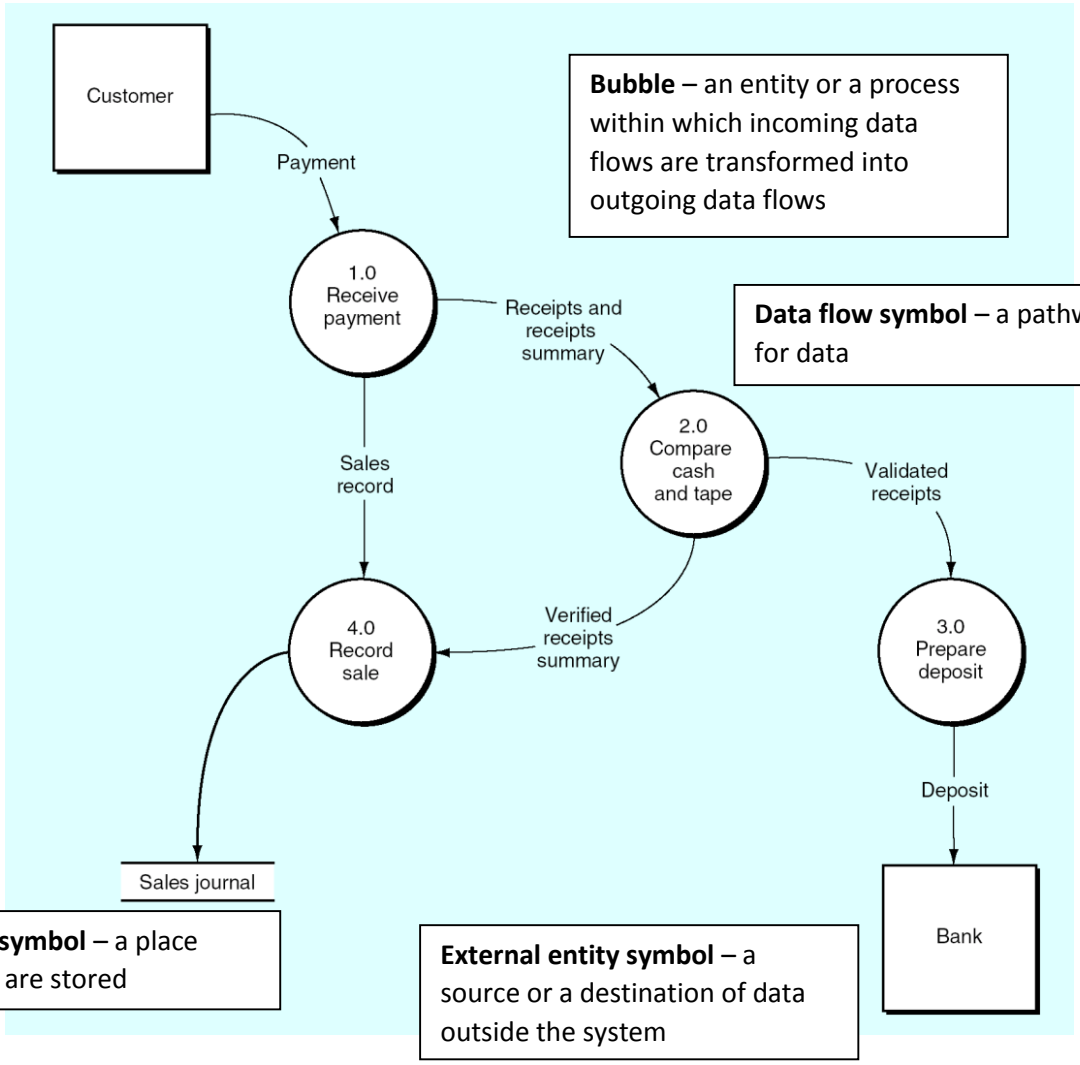
- Think holistically, in the role of a business analyst and main concern is to assist in business process improvement.
- Determine what UoS theory can be used
- Determine what case details can be used to illustrate your answer

a) Systems Mapping and Documentation (Week 3 & 4)

Process Documentation

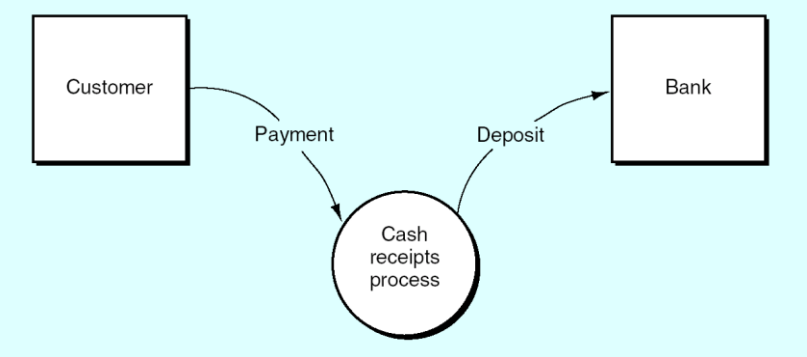
- Preparing and using process documentation is an important skill for an accountant
- Data flow diagrams portray a business process activities, stores of data, and flows of data among those elements
- System flowcharts present a comprehensive picture of the management, operations, information systems, and process controls embodied in business processes.

Data Flow Diagrams (DFDs) (below is a logical DFD)



- **Data flow diagram:** a graphical representation of a system that depicts the systems components; the data flows among the components; and the sources, destinations, and storage of data;
    - Use a limited number of symbols; and
    - Do not depict management or operational elements of a system.

- **Context diagram:** top-level, or least a detailed, diagram of a system depicting the system and all its activities as a single bubble and showing the data flows into and out of the system and into and out of the external entities.



- **External entities:** those entities (i.e., persons, places, or things) outside the system that send data to, or receive data from, the system.

- **Internal entity:** an entity within the system that transforms data. Includes, for example, accounting clerks (persons), departments (places), and computers (things).

- **Activity:** any action being performed by an internal or external entity.
    - Actions related to data (send data, transform data, file or store data, retrieve data from storage, or receive data).

- **Logical data flow diagram (DFD):** graphical representation of a system showing the system's processes (as bubbles), data stores, and the flows of data into and out of the processes and data stores.
    - Specifies *what* activities the system is performing, without specifying *how*, *where*, or by *whom* the activities are accomplished.
    - Logical DFDs portray a system's activities.

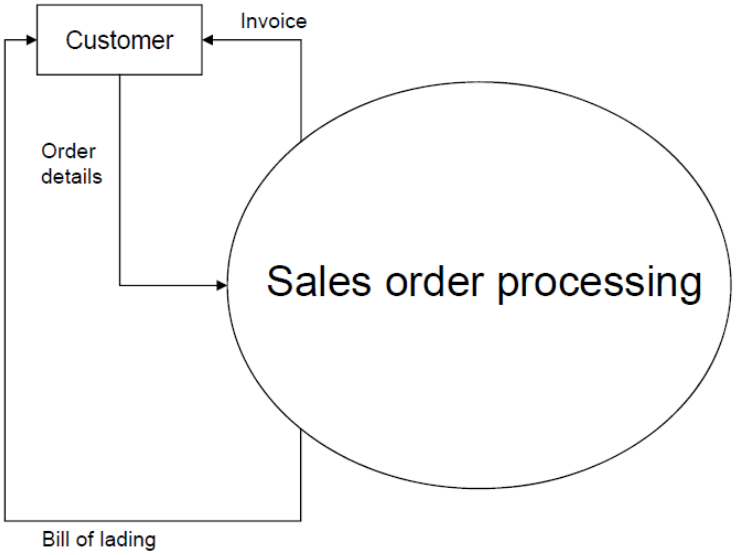
- **Balanced DFDs -** when the external data flows of two or more DFDs are equivalent.
    - DFD (a) is a context diagram.
    - DFD (b) is an "explosion" of the context into a level 0 DFD.
    - DFDs (c) and (d) are explosions of level 0 bubbles 1.0 and 3.0. While DFD (e) is an explosion of bubble 3.1.

Exercise: Sales Order Processing

All sales are taken over the phone by the customer service department. The representatives get call from pre-approved customers. Once an order is placed, the computer systems automatically removes the items from inventory in real time and the order is filed. Two times a day the customer service department generates the picks – essentially a packing slip which also functions as a stock release. Once the warehouse have packed the items two copies of a bill of lading are produced

using customer shipping details from the system. One is sent with the packages and the other is stapled to and filed with the packing slip. At the end of the day these documents are collected and used to update the sales journal, the accounts receivable subsidiary and the general ledger. This process also generates invoices – one copy of which is mailed to the customer and another filed.

Context



DFD sales order processing