

Section 5 Notes

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1 DFD

Data flow diagram is *graphical* representation that describes *processes* and *data movement* through the organization.

1.1 Components

- Entity
- Process
 - Child processes
- Data flow (represented by *arrows*)
- Data Store

1.1.1 Process

Process is an *function* performed for a specific business reason.

Every Process has

- number
- name (*verb* phrases)
- at lease one output
- at least one input

- can be broken down into child processes
- has the visual shape of a rounded rectangle

A process that has no output is *black-hole process* A process that has no input is *Miracle process*

1.1.2 Data flow

description of movement of data from one point to another.

- Data is *single* piece or *logical collection* of *several* pieces of information.

1.1.3 Data store

is collection of data that is stored in some way(determined *later* during the physical model)

Every data store has

- a number (unique identifier)
- a name
- at least one input data flows (unless it's created by another dfd)
 - The data store exists already \therefore it doesn't need an input data flow
- at least one output data flows
- shall be connected to process

1.1.4 Entity

Person,org,system that is external to the system but interacts (*provides* data or *receives* data) with it

- External Entity *examples*:
 - *person*
 - *orgs*
 - *department*
 - *another system*
- Every entity has
 - name
 - can't be connected to another entity i.e. it's independent in existence
 - has a shape of two rectangles inside of each other.

1.2 Development of dfd

- built in levels *i.e series of DFDs)

Reason Most process are complex to be created in a single DFD

1.2.1 Context diagram

is a single process has the name of the system with external entities -
has no data store

1.2.2 Diagram 0

- major process
- 7 to 9 process
- numbered