

DFD Examples

Creating Data Flow Diagrams

Steps:

1. Create a list of activities
2. Construct Context Level DFD
(identifies external entities and processes)
3. Construct Level 0 DFD
(identifies manageable sub process)
4. Construct Level 1- n DFD
(identifies actual data flows and data stores)
5. Check against rules of DFD

Creating Data Flow Diagrams

Lemonade Stand Example



Creating Data Flow Diagrams

Example

The operations of a simple lemonade stand will be used to demonstrate the creation of dataflow diagrams.



Steps:

1. Create a list of business transactions
2. Construct Context Level DFD
(identifies system and entities)
 - Decomposition
3. Construct Level 0 DFD
(identifies manageable sub processes)
4. Construct Level 1- n DFD
(identifies actual data flows and data stores)

Creating Data Flow Diagrams

Example

List all the primary business transactions that take place at a lemonade stand.



1. Create a list of business transactions

Customer Order
Serve Product
Collect Payment
Produce Product
Store Product

Creating Data Flow Diagrams

Example

Also **think of the additional transactions needed** to support the basic activities.



1. Create a list of business transactions

Customer Order

Serve Product

Collect Payment

Produce Product

Store Product

Order Raw Materials

Pay for Raw Materials

Pay for Labor

Creating Data Flow Diagrams

Example

Decompose these transactions in logical fashion, possibly functional areas.



1. Create a list of activities

Sale

1. Customer Order
2. Serve Product
3. Collect Payment

Production

1. Produce Product
2. Store Product

Procurement

1. Order Raw Materials
2. Pay for Raw Materials

Payroll

1. Pay for Labor

Creating Data Flow Diagrams

Example

Create a context level diagram identifying the system and entities.

Customer Order

Serve Product

Collect Payment

Produce Product

Store Product

Order Raw Materials

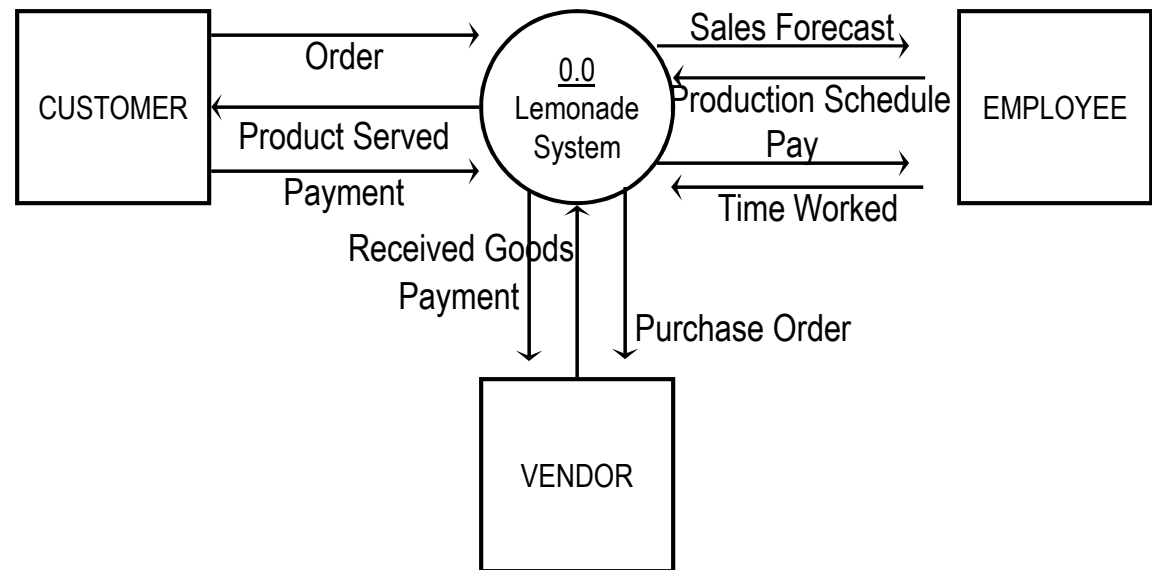
Pay for Raw Materials

Pay for Labor



2. Construct Context Level DFD

Context Level DFD



Creating Data Flow Diagrams

Example

Create a level 0 diagram identifying the logical subsystems that may exist.

Customer Order
Serve Product
Collect Payment

Produce Product
Store Product

Order Raw Materials
Pay for Raw Materials

Pay for Labor



3. Construct Level 0 DFD
(based on previous decomposition)

Level 0 DFD

