

Business Process Management Systems (2II55)  
Party store "Drankorgel"

GROUP 1

Oliver Schinagl (0580852)  
Maik Teurlings (0591600)  
Wilrik De Loose (0601583)

April 13, 2008

# 1 Settings

## 1.1 Organizational context

The Party store is composed of four groups - the warehouse, store, administration and logistics department. The organizational model of the party store is presented below where the blue color represents groups and the green color represents roles.

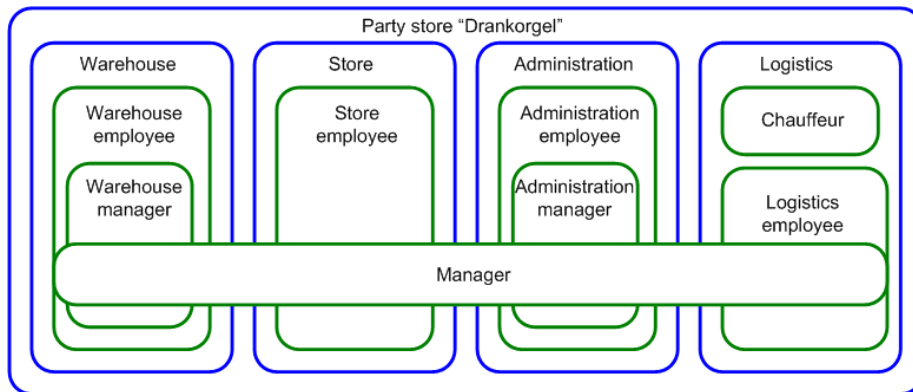


Figure 1: Organizational context of the Party store

## 1.2 Workflow process A

When someone places an order the good people of "Drankorgel" will prepare the order. Also, for each order there will be some logistics involved. These will be scheduled only when the customer has payed the bill. The customer can directly pay or choose to pay by bill.

When the customer has payed the bill, the order is completed. When the bill is not payed within a week, a reminder will be sent. If the customer does'nt pay after two reminders the order is canceled and the prepared goods are put back into the warehouse.

The preparing of an order will involve picking the order until the entire order is prepared. Then the goods are checked and send if the order is complete. If the order picker made a mistake he will have the opportunity to re-pick until the inspection is ok. If some goods are out of stock and need to be ordered, the order can only be finished upon arrival of the goods.

After preparing the order and receiving the money the goods are ship by the planned logistic means. If the order contained hired wares, that equipment will be retrieved by the company. If, after the inspection, everything seems in order, then the customer will not be bothered until the next order he or she places. If something is wrong, an extra fine has to be paid depending on the damage or missing equipment. If the customer does not pay after getting two reminders, he will be sued and the money will eventually go to the store.

### **1.3 Workflow process B**

Every now and then an employee checks if the warehouse needs to be restocked or if some goods passed their freshness date. This is done by hand and for every item the store sells. If a certain item passed the date, it is thrown away. If not, the next item will be evaluated. If the quantity is low for that item, it will be put on the 'restock list'.

If the employee finished the route in the warehouse and inspected all the goods, the 'restock list' is used to order the items that were running out of stock.

Upon arrival of new goods, the entire order needs to be checked before the item are put in the warehouse. An employee checks for both missing (ordered but not received) and extra (received but not ordered) items. Missing items will be re-ordered and extra goods will be returned.

After checking the order some employee will place the items on the right shelf in the warehouse.

## **2 Protos models**

### **2.1 Workflow process A**

#### **2.1.1 Process perspective**

to do...

#### **2.1.2 Resource perspective**

to do...

### 2.1.3 Task description

Name	Executor	Description
Order	Store employee	The store employee takes an order of a customer.
Receive cash	Store employee	The store employee receives the cash money from the customer.
Create bill	Administrative employee	The order is processed and the bill for the customer is being created.
Send bill	Administrative employee	The bill is being send to the customer.
Payment received	Administrative manager	The manager marks the order as being paid.
Payment timeout	System	
Plan logistics 1	Logistics employee	The manager plans the logistics used for the shipment of the ordered goods.
Confirm logistics 1	Logistics employee	The manager confirms the logistics after the payment has been received.
Pay logistics 1	Administrative manager	The manager pays the logistics after the logistics have been confirmed.
Pick order	Warehouse employee	The employee picks the needed goods for the order.
Order goods	Warehouse manager	The manager orders the goods needed to complete the order.
Receive goods	Warehouse employee	Employee $e_1$ receives the goods ordered by the manager to complete the order.
Inspect order	Warehouse employee	Employee $e_2$ , where $e_1 \neq e_2$ , inspects the order for completeness.
Cancel order	Manager	The manager can decide to cancel an order
Put back goods	Store employee	After a order is canceled the goods are placed back into the warehouse.
Cancel party	Manager	After the payment has been done and before the goods are being delivered, the party can be canceled by the manager.
Deliver goods	Chauffeur	The chauffeur delivers the goods to the party.
Refund	Administrative manager	After the cancelation of a party the manager can refund the money paid by the customer.
Plan logistics 2	Logistics employee	The manager plans the logistics for the retrieval of the goods.
Confirm logistics 2	Logistics employee	The manager confirms the logistics for the retrieval of the goods.
Pay logistics 2	Administrative manager	The manger pays the money for the logistics of the retrieval of the goods.
Pick up goods	Chauffeur	The chauffeur retrieves the goods after the party has been held.
Inspect goods	Warehouse manager	The manager inspects the retrieved goods for damages or missing parts.
Send fine	Administrative employee	The employee sends a fine for the damaged or missing goods.
Fine timeout	System	5
Receive fine	Administrative manager	The manager has received the money for the fine.
Paid by lawsuit	Administrative manager	The manager has sued the customer and eventually received the money.

#### 2.1.4 Data perspective

##### Order specifications:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Order	✓	✓		
Main process	Receive cash	✓			
Main process	Create bill	✓			
Main process	Send bill	✓			
Main process	Payment timeout	✓			✓
Main process	Pick order	✓			
Main process	Inspect order	✓			
Main process	Plan logistics 1	✓			
Main process	Cancel order	✓			
Main process	Put back goods	✓			✓
Main process	Cancel party	✓			
Main process	Refund	✓		✓	
Main process	Plan logistics 2	✓			
Main process	Confirm logistics 2	✓			
Main process	Inspect goods	✓			
Main process	Send fine	✓			✓
Main process	Receive fine	✓		✓	
Main process	Fine timeout	✓			✓
Main process	Paid by lawsuit	✓		✓	

##### Customer specifications:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Order	✓	✓		
Main process	Receive cash	✓			
Main process	Create bill	✓			
Main process	Send bill	✓			
Main process	Payment timeout	✓			✓
Main process	Payment received	✓			✓
Main process	Cancel order	✓			
Main process	Cancel party	✓			
Main process	Refund	✓		✓	
Main process	Send fine	✓			✓
Main process	Receive Fine	✓		✓	
Main process	Fine timeout	✓			✓
Main process	Paid by lawsuit	✓		✓	

**Order price:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Order	✓	✓		
Main process	Receive cash	✓			
Main process	Create bill	✓			
Main process	Send bill	✓			
Main process	Payment received	✓			
Main process	Payment timeout	✓			✓
Main process	Refund	✓		✓	
Main process	Send fine	✓			✓
Main process	Receive fine	✓		✓	
Main process	Fine timeout	✓			✓
Main process	Paid by lawsuit	✓		✓	

**Ordering list:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Order goods	✓	✓		
Main process	Receive goods	✓		✓	

**Order pick list:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Pick order	✓	✓		
Main process	Order goods	✓			
Main process	Receive goods	✓			
Main process	Inspect order	✓			
Main process	AND-join	✓		✓	

**Logistics plan:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Plan logistics 1	✓	✓		
Main process	Confirm logistics 1	✓			
Main process	Pay logistics 1	✓			
Main process	Deliver goods	✓		✓	
Main process	Plan logistics 2	✓	✓		
Main process	Confirm logistics 2	✓			
Main process	Pay logistics 2	✓			
Main process	Pick up goods	✓		✓	

**Chauffeur id:**



Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Plan logistics 1	✓	✓		
Main process	Confirm logistics 1	✓			
Main process	Pay logistics 1	✓			
Main process	Deliver goods	✓		✓	
Main process	Plan logistics 2	✓	✓		
Main process	Confirm logistics 2	✓			
Main process	Pay logistics 2	✓			
Main process	Pick up goods	✓		✓	

**Jurisdictional rules:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Send fine	✓	✓		
Main process	Receiver fine	✓			
Main process	Fine timeout	✓			
Main process	Paid by lawsuit	✓		✓	

**Warehouse employee id:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect order	✓	✓	✓	
Main process	Inspect goods	✓	✓	✓	

**Cancellation form:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Cancel order	✓	✓		
Main process	Put back goods	✓		✓	
Main process	Cancel party	✓	✓		
Main process	Refund	✓		✓	

## 2.2 Workflow process B

### 2.2.1 Process perspective

to do...

### **2.2.2 Resource perspective**

to do...

### 2.2.3 Task description

Name	Executor	Description
Inspect goods	Warehouse employee	The employee inspects the goods inside the warehouse for both freshness date and quantity.
Check date	Warehouse employee	The employee checks the freshness date of a particular item.
Throw away	Warehouse employee	The employee discards of the item if it expired it's date.
Update inventory 1	Warehouse manager	The manager updates the inventory after an item is discarded.
Check quantity	Warehouse employee	The employee checks the quantity of a particular item.
Add to order	Warehouse employee	The employee adds the out of stock item to the ordering list.
AND-join	System	
Order goods	Warehouse manager	The manager orders the goods that are on the ordering list.
Check goods	Warehouse employee	The employee checks the goods after an order arrives if it's complete.
Check quality	Warehouse employee	The employee checks the quality of the incoming goods.
Return goods	Warehouse employee	The employee returns the goods which were lacking quality.
Check quantity	Warehouse employee	The employee checks if the quantity of the goods is correct.
Order extra goods	Warehouse manager	The manager re-orders the missing items.
AND-Join	System	
Put in warehouse	Warehouse employee	The employee puts the incoming goods inside the warehouse.
Update inventory 2	Warehouse manager	The manager updates the inventory after the new items arrived.
Search new warehouse	Manager	The manager searches for a suitable new warehouse.
Return to supplier	Chauffeur	The chauffeur returns the goods to the supplier because of the lack of space in the warehouse.
Plan & confirm logistics	Logistics employee	The manager plans and confirms the logistics for the reshipment of the goods.
Pay logistics	Logistics employee	The manager pays the logistics for the reshipment of the goods.
Deliver at warehouse	Chauffeur	The chauffeur delivers the goods to the new warehouse.

#### 2.2.4 Data perspective

##### Inspect Date List:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect goods	✓	✓		
Main process	Check date	✓			
Main process	Throw away	✓			✓
Main process	Update inventory 1	✓			
Main process	And-join	✓			

##### Throw Away Documents:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect goods	✓	✓		
Main process	Check date	✓			✓
Main process	Throw away	✓			
Main process	And-join	✓		✓	

##### Inspect Quantity List:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect goods	✓	✓		
Main process	Check quantity	✓			✓
Main process	Add to order	✓			
Main process	And-join	✓		✓	

##### Ordering list:

<b>Subprocess</b>	<b>Object</b>	<b>Mandatory</b>	<b>Created</b>	<b>Deleted</b>	<b>Changed</b>
Main process	Inspect goods	✓	✓		
Main process	Check quantity	✓			
Main process	Add to order	✓			✓
Main process	And-join	✓			
Main process	Order goods	✓			
Main process	Check goods	✓			
Main process	Check quality				
Main process	Return goods				
Main process	Check quantity	✓			
Main process	Order extra goods	✓			
Main process	And-join	✓		✓	

**Complaint form:**

<b>Subprocess</b>	<b>Object</b>	<b>Mandatory</b>	<b>Created</b>	<b>Deleted</b>	<b>Changed</b>
Main process	Check goods	✓	✓		
Main process	Check quality	✓			✓
Main process	Return goods	✓			
Main process	And-join	✓		✓	

**Item list:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	And-join	✓	✓		
Main process	Put in warehouse	✓			✓
Main process	Update inventory 2	✓		✓	
Main process	Search new warehouse	✓			
Main process	Return to supplier	✓			
Main process	Plan & confirm logistics	✓			
Main process	Pay logistics				
Main process	Deliver goods	✓			

**Item checklist:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Put in warehouse	✓	✓		
Main process	Update inventory 2	✓		✓	

**Warehouses list:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Search new warehouse	✓	✓		
Main process	Return to supplier	✓		✓	
Main process	Plan & confirm logistics	✓			
Main process	Deliver goods	✓		✓	

**Logistics documents:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Return to supplier	✓			
Main process	Plan & confirm logistics	✓	✓		
Main process	Pay logistics	✓			
Main process	Deliver goods	✓		✓	

**Supplier documents:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Add to order	✓			
Main process	Order goods	✓			
Main process	Check goods	✓			
Main process	Check quality				
Main process	Return goods	✓			
Main process	Check quantity				
Main process	Order extra goods	✓			
Main process	Return to supplier	✓			

**Warehouse inventory:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect goods	✓			
Main process	Update inventory 1	✓			✓
Main process	Put in warehouse	✓			
Main process	Update inventory 2	✓			✓
Main process	Return to supplier	✓			✓
Main process	Search new warehouse	✓			
Main process	Deliver goods	✓			

**Financial register:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Order goods	✓			
Main process	Order extra goods	✓			
Main process	Return to supplier	✓			
Main process	Search new warehouse	✓			
Main process	Plan & confirm logistics	✓			
Main process	Pay logistics	✓			✓

**Employee ID:**

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Check date	✓			
Main process	Check quantity	✓			
Main process	Check quality	✓			
Main process	Check quantity	✓			