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

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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.

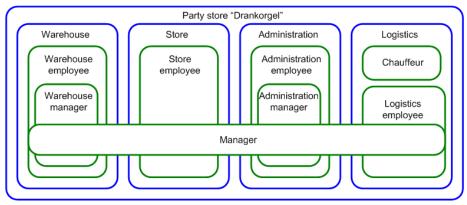


Figure 1: Organizational context of the Party store

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...

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

2.1.3 Task description

Fine	System	
timeout		
Receive	Administrative	The manager has received the money for the fine.
fine	manager	
Paid by	Administrative	The manager has sued the customer and eventually
lawsuit	manager	received the money.

2.1.4 Data perspective

Order specifications:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Order	\checkmark	\checkmark		
Main process	Receive	\checkmark			
	\cosh				
Main process	Create	\checkmark			
	bill				
Main process	Send bill	\checkmark			
Main process	Payment	\checkmark			\checkmark
	timeout				
Main process	Pick	\checkmark			
	order				
Main process	Inspect	\checkmark			
	order				
Main process	Plan	\checkmark			
	logistics				
Main process	Cancel	\checkmark		\checkmark	
Main process	Cancel	\checkmark			
	party				
Main process	Refund	\checkmark		\checkmark	
Main process	Plan &	\checkmark			
	confirm				
	logistics				
Main process	Inspect	\checkmark			
	goods				
Main process	Send fine	\checkmark			\checkmark
Main process	Fine paid	\checkmark		\checkmark	
Main process	Send new	\checkmark			\checkmark
	fine				
Main process	Paid by	\checkmark		\checkmark	
	lawsuit				

2.2 Workflow process B

2.2.1 Process perspective

to do...

2.2.2 Resource perspective

to do...

Name	Executor	Description
Inspect	Warehouse em-	The employee inspects the goods inside the ware-
goods	ployee	house for both freshness date and quantity.
Check	Warehouse em-	The employee checks the freshness date of a partic-
date	ployee	ular item.
Throw	Warehouse em-	The employee discards of the item if it expired it's
away	ployee	date.
Update	Warehouse	The manager updates the register after an item is
register	manager	discarded.
Check	Warehouse em-	The employee checks the quantity of a particular
quantity	ployee	item.
Add to	Warehouse em-	The employee adds the out of stock item to the or-
order	ployee	dering list.
AND-join	System	
Order	Warehouse	The manager orders the goods that are on the order-
goods	manager	ing list.
Check	Warehouse em-	The employee checks the goods after an order arrives
goods	ployee	if it's complete.
Check	Warehouse em-	The employee checks the quality of the incoming
quality	ployee	goods.
Return	Warehouse em-	The employee returns the goods which were lacking
goods	ployee	quality.
Check	Warehouse em-	The employee checks if the quantity of the goods is
quantity	ployee	correct.
Order ex-	Warehouse	The manager re-orders the missing items.
tra goods	manager	
AND-	System	
Join		
Put in	Warehouse em-	The employee puts the incoming goods inside the
ware-	ployee	warehouse.
house		
Register	Warehouse	The manager updates the register after the new items
goods	manager	arrived.
Search	Manager	The manager searches for a suitable new warehouse.
new		
ware-		
house		
Return to	Chauffeur	The chauffeur returns the goods to the supplier be-
supplier		cause of the lack of space in the warehouse.
Plan &	Logistics man-	The manager plans and confirms the logistics for the
confirm	ager	reshipment of the goods.
logistics		
Pay logis-	Logistics man-	The manager pays the logistics for the reshipment of
tics	ager	the goods.
Deliver	Chauffeur	The chauffeur delivers the goods to the new ware-
goods		house.

2.2.3 Task description

2.2.4 Data perspective

Inspect Date List:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect	\checkmark	\checkmark		
	goods				
Main process	Check	\checkmark			
	date				
Main process	Throw	\checkmark			\checkmark
	away				
Main process	Update	\checkmark			
	register				
Main process	And-join	\checkmark			

Inspect Quantity List:

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

Ordering list:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect	\checkmark	\checkmark		
	goods				
Main process	Check	\checkmark			
	quantity				
Main process	Add to	\checkmark			\checkmark
	order				
Main process	And-join	\checkmark			
Main process	Order	\checkmark			
	goods				
Main process	Check	\checkmark			
	goods				
Main process	Check				
	quality				
Main process	Return				
	goods				
Main process	Check	\checkmark			
	quantity				
Main process	Order ex-	\checkmark			
	tra goods				
Main process	And-join	\checkmark		\checkmark	

Complaint form:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Check	\checkmark	\checkmark		
	goods				
Main process	Check	\checkmark			\checkmark
	quality				
Main process	Return	\checkmark			
	goods				
Main process	And-join	\checkmark		\checkmark	

Item list:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	And-join	\checkmark	\checkmark		
Main process	Put in	\checkmark			\checkmark
	ware-				
	house				
Main process	Register	\checkmark		\checkmark	
	goods				
Main process	Search	\checkmark			
	new				
	ware-				
	house				
Main process	Return to	\checkmark			
	supplier				
Main process	Plan &	\checkmark			
	confirm				
	logistics				
Main process	Pay logis-				
	tics				
Main process	Deliver	\checkmark			
	goods				
Itom chocklist					

Item checklist Subprocess	: Object	Mandatory	Created	Deleted	Changed
Main process	Put in ware- house	\checkmark	V		
Main process	Register goods	\checkmark		\checkmark	

Warehouses list:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Search	\checkmark	\checkmark		
	new				
	ware-				
	house				
Main process	Return to	\checkmark		\checkmark	
	supplier				
Main process	Plan &	\checkmark			
	confirm				
	logistics				
Main process	Deliver	\checkmark		\checkmark	
	goods				

Logistics documents:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Return to	\checkmark			
	supplier				
Main process	Plan &	\checkmark	\checkmark		
	confirm				
	logistics				
Main process	Pay logis-	\checkmark			
	tics				
Main process	Deliver	\checkmark		\checkmark	
	goods				

Supplier documents:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Add to	\checkmark			
	order				
Main process	Order	\checkmark			
	goods				
Main process	Check	\checkmark			
	goods				
Main process	Check				
	quality				
Main process	Return	\checkmark			
	goods				
Main process	Check				
	quantity				
Main process	Order ex-	\checkmark			
	tra goods				
Main process	Return to	\checkmark			
	supplier				

Warehouse register:

Subprocess	Object	Mandatory	Created	Deleted	Changed
Main process	Inspect	\checkmark			
	goods				
Main process	Update	\checkmark			\checkmark
	register				
Main process	Put in	\checkmark			
	ware-				
	house				
Main process	Register	\checkmark			\checkmark
	goods				
Main process	Return to	\checkmark			\checkmark
	supplier				
Main process	Search	\checkmark			
	new				
	ware-				
	house				
Main process	Deliver	\checkmark			
	goods				