

# BPMN2.0 Practice Question1

As soon as an invoice is received from a customer, it needs to be checked for mismatches.

- The check may result in either of these three options: –
  - i) there are no mismatches, in which case the invoice is posted;
  - ii) there are mismatches but these can be corrected, in which case the invoice is re-sent to the customer; and
  - iii) there are mismatches but these cannot be corrected, in which case the invoice is blocked.
- Once one of these three activities is performed the invoice is parked and the process completes.

# BPMN2.0 – Practice Question 2

Once the boarding pass has been received, passengers proceed to the security check. Here they need to pass the personal security screening and the luggage screening. Afterwards, they can proceed to the departure level.

# BPMN2.0 – Practice Question 3

A company has two warehouses that store different products: Amsterdam and Hamburg.

When an order is received, it is distributed across these warehouses: if some of the relevant products are maintained in Amsterdam, a sub-order is sent there; likewise, if some relevant products are maintained in Hamburg, a sub-order is sent there.

Afterwards, the order is registered and the process completes.

# BPMN2.0- Practice Question 4

After the reception of a meeting remainder, a new account must be created if the employee does not already have one. The report is then reviewed for automatic approval. Amounts under \$200 are automatically approved, whereas amounts equal to or over \$200 require approval of the supervisor.

In case of rejection, the employee must receive a rejection notice by email. The reimbursement goes to the employee's direct deposit bank account. If the request is not completed in 7 days, then the employee must receive an "approval in progress" email. If the request is not finished within 30 days, then the process is stopped and the employee is advised to start again.

# BPMN2.0 - Practice Question 5

Customer sends order to company A.

Order needs to be entered to CRM system and checked by operations and if something is missing/wrong operations ask internal call center to contact the customer and correct the order. When order is OK, it is sent to fulfillment for company B (vendor).

Vendor sends the product to the customer.

Since the case study does not give you all the details you are free to make some assumptions and create a diagram accordingly.

# BPMN2.0 - Practice Question 6

The customer calls the support center and reports an issue about underperforming service or faulty equipment or software.

The Front Office collects information from the Customer and tries to provide a solution directly to the Customer on the other end of the line, otherwise they inform the Customer the issue is going to be escalated to technical experts and they will be contacted again soon.

When the Front Office receives the solution from the technical experts, they contact the customer and try to close the issue; otherwise they inform the Customer that the issue is going to be further escalated.

When the issue is escalated to the 1st Level Technical Support Agent, the agent tries to provide a solution to the Front Office; otherwise they request further assistance from the 2nd Level Technical Support Agent and forward the solution to the Front Office when a solution has been provided.

When the issue is escalated to the 2nd Level Technical Support Agent, the agent tries to find a solution for the 1st Level Technical Support Agent; otherwise they request further assistance from the Supplier and forward the solution to the 1st Level Technical Support Agent when provided.

When the Supplier receives a request from the 2nd Level Technical Support Agent they provide a solution to the reported issue. You are free to make assumptions if any details are missing.

# BPMN2.0 – Practice Question 7

The process starts when HR department receives information from a Candidate that she accepted the job offer. HR clerk needs to send the contract to Candidate.

If the Candidate signed the contract, Clerk needs to notify the Responsible Department. In this case Candidate details are stored in HRM application.

If the Candidate did not sign the contract, Clerk needs to review the contract and send it to Candidate (again).

After notifying the Responsible Department, Clerk needs to inform the Candidate of company policies and procedures.

Afterwards Candidate is registered for the medical insurance.

After receiving the notification, Responsible Department Clerk needs to identify the necessary preparations (on a basis of data from the HRM application).

Preparations are standard procedures handled by other departments: IT (Prepare IT Environment), Payroll (Update Payroll Records) and Facilities (Configure Access Cards).

When all 3 aspects were finished, Clerk needs to compile the welcome package for the new employee.

When this is done and HR Clerk registered the Candidate for medical insurance, Responsible Department Clerk passes the welcome package to their new colleague, assigns a mentor and defines dates of necessary training.

This completes the process and new employee is ready for work.

You are free to make assumptions, if any details are missing.

# BPMN2.0 – Practice Question 8

You have been tasked with preparing the following Business Process Diagram ( BPD) using BPMN 2.0

Process Name : Administer Insurance Application

Company Name : Green Trees Insurance Limited

Process Participants : Sales Department , Underwriting Department

The process starts when an insurance application form is received from the customer by the Sales Department.

The first task is for the Sales Department to "Review Application". This task is performed by a system without any human intervention.

If the application is completed correctly it gets sent to the Underwriting team

The first task for the Underwriting team is to review the applicant to see if he or she is deemed okay to insure

If the applicant is deemed okay to insure then the Underwriting team create a policy. They then send a copy a policy confirmation notification to the customer and the process ends.

If the application is not complete when received by the Sales department it gets returned to the customer and the process ends

If the Underwriting team are not comfortable insuring the applicant then the customer gets notified that their insurance request has been rejected and the process ends.



# BPMN2.0 – Practice Question 9

You have been tasked with preparing the following Business Process Diagram ( BPD) using BPMN 2.0

Process Name : Administer Insurance Application

Company Name : Yellow Trees Limited

Process Participants : Policy Administration Department , Underwriting Department

The process starts when an insurance application form is received from the customer by the Policy Administration Department. The first tasks are for the Admin Department to review the application for completeness" and to "Validate the customers proof of identity (POI) details. Both of these tasks are performed by a human and can be completed in parallel.

If the application is completed correctly and if the POI details are validated the application moves to underwriting where a human checks the applicants credit history

If the applicants credit history is okay then the Underwriting team create a policy. Once the policy is created the applicant gets an automated notification informing them of their policy details and the process ends.

However, if the applicants credit history is not okay then a human sends them a rejection notification and the process ends.

Also, if the application that the customer submitted is deemed to be incomplete by the Policy Admin Team, then a signal is sent to the other parallel path so that the task of validating the customers POI, if still being undertaken, can be interrupted and that path brought to an end.

The application is returned to the customer and that path is brought to an end also.

If, while validating the customers POI details, an exception is found then the process level terminates immediately.

# BPMN2.0 – Practice Question 10

- A loan application is approved if it passes two checks: i) the Applicant's credit history check, done by a Financial Officer, and ii) the Applicant's loan risk assessment, done by a Risk Assessor. Once both checks have been performed, a Loan Officer can assess the Applicant's eligibility. If the Applicant is not eligible, the application is rejected, otherwise it is approved.
- A loan application may be coupled with a home insurance which is offered at discounted prices. The Applicant may express their interest in a home insurance plan at the time of submitting their loan application to the Loan Provider. Based on this information, if the loan application is approved, the Loan Provider may either only send an acceptance pack to the Applicant, or also send a home insurance quote.

# BPMN2.0 – Practice Question 11

The motor claim handling process starts when a customer submits a claim with the relevant documentation. The notification department at the car insurer checks the documents upon completeness and registers the claim. Next, the handling department picks up the claim and checks the insurance. Then, an assessment is performed. If the assessment is positive, a garage is phoned to authorize the repairs and the payment is scheduled (in this order). Otherwise, the claim is rejected. In any case (whether the outcome is positive or negative), a letter is sent to the customer and the process is considered to be complete.

# BPMN2.0 – Practice Question 12

After a supplier notifies a retailer of the approval of a purchase order, the supplier can either receive an order confirmation, an order change or an order cancelation from the retailer. It may happen that no response is received at all. If no response is received after 48 hours, or if an order cancelation is received, the supplier will cancel the order. If an order confirmation is received within 48 hours, the supplier will process the order normally. If an order change is received within 48 hours, the supplier will update the order and ask again the retailer for confirmation. The retailer is allowed to change an order at most three times. Afterwards, the supplier will automatically cancel the order. If the order is canceled the supplier send a customer feedback questionnaire request to retailer.

# BPMN2.0 – Practice Question 13

Max is facing a new challenge. He receives a shipment from the wholesaler and doesn't know what to do next. His boss tells him: No worries Max. First you check whether the order and the invoice are correct. If not, you give the package back to the shipping clerk. If it's correct you check if it's a standard order or if it's an ordered by a customer. If it's a standard order you simply put the shoes into the warehouse. If it's an order for a customer, put the shoes behind the cash deck and that's it! Your job now is to help Max by creating a simple process. Ignore the tasks of the shipping clerk for now. Just model what Max needs to do.

# BPMN2.0 – Practice Question 14

Gonzales has an idea. As his fuel team acted a bit slow the last time, he talks to his manager and tells him: When I arrive at the box, both teams start to work in parallel as usual. The wheel team simply changes the wheels. The fuel team however, first checks how many rounds are left. If 5 or less rounds are left, the fuel team will fill only half of the gas tank. If more than 5 rounds are left, the entire gas tank needs to be filled. So the fuel refill is faster when 5 or less rounds are left. Your job now is to help the head of mechanics to map the process so he can effectively communicate the procedure with his team.

# BPMN2.0 – Practice Questions 15

Susan is still keen on further optimizing the customer experience! Therefore, she chats with her boss and tells him that she wants to develop a new process that works like this: After the sample has been sent, I will dispatch a product catalogue to the customer. We have only 2 product catalogues. I will check which samples I've sent to the customer. If he or she got a cosmetic product, I'll send our cosmetic catalogue. If he or she got a voucher, I'll send our standard catalogue. If he or she received both, I'll send both catalogues. After that, I'll document the catalogue shipment in our CRM system. Your job now is to map this new process so Susan can effectively communicate the procedure with her team.

# BPMN2.0 – Practice Question 16

The Wholesaler 'Luxxis' is a small company that sells Hi-Fi Equipment. In the early days the company developed and produced its own Hi-Fi Equipment. However, cheap products from China turned the production into a loss-making business. Therefore, Robert Smith, the son of the founder, turned the business into a profitable wholesaler by focusing on their strong brand and establishing and excellent customer service.

The 'Order Received to Order Fulfilled' process is the heart of the operative side of the business. When a customer orders a good, it is absolutely critical that she receives the ordered Hi-Fi equipment in time and is always informed about the state of the order.

Robert Smith, the CEO of 'Luxxis', has just discovered how powerful BPMN is for the optimization and automation of his business. The process documentation is always the first step for a process optimization or automation. He therefore hired you as a consultant to map the 'Order Received to Order Fulfilled' process in BPMN. That's why, you talk John Hank, the Head of Operations in order to better understand the process.



# Question 16 - Continued

The process starts when we receive an order from a customer. The accounting will then check if the order is valid. If the order is not valid, for example if the customer forgot to state the amount of desired goods, the responsible sales manager will contact the customer and correct the order.

After this, the warehouse team start their work. They will check if the ordered items are available. If so, all items will be packed and shipped. Then, a shipping confirmation will be sent to the customer. If some items are not in stock, however, the warehouse team orders the missing items from the supplier. Then, they will inform the customer about the delayed delivery. As soon as the items have arrived, they will pack and ship the items, and inform the customer, as before.

Now, during the warehouse is executing these tasks, the accounting generates the invoice. They will send this invoice to the customer, after the warehouse team has sent the shipping confirmation. Now, as soon as the accounting team has received the money from the customer, they will close the case. With this, the process ends.

It's now your task to translate the spoken words into a BPMN 2.0 process.

# BPMN2.0 – Practice Question 17

Space tourists are extremely demanding customers. You are hired as a consultant to design the boarding process. The CEO of “Space Z” tells you: “When the passenger arrives at the space station, the boarding team will perform the check-in. After that they will bring him or her to the waiting lounge. And - as we have very demanding passengers - the boarding team will offer him or her cold drinks and snacks.

Thirty minutes before take off, the passenger will then be guarded safely on the space ship to his seat. In the meantime, after the check-in, the cargo team will load the luggage of the passenger onto the cargo container. Now one of two events can occur. First, the cargo container may be fully loaded. If this is the case, the cargo team will load the container onto the space ship.

The second option is that only 30 minutes before take off are left. In this case, all containers – no matter if they are full or not - will be collected and then loaded onto the space ship. After both teams have completed their tasks, the space ship is ready for take off.”