Modelling common process patterns with BPMN

Pattern #3 – Wait and chase

Many business processes in service organisations involve sending a communication to someone outside the process (e.g. to a customer) and chasing for a response if none is received. Business rules specify how long to wait until chasing is performed.



As this feels like a looping process, it might be tempting to reach for the "loop" activity type. Step away from the loop symbol!

Instead, BPMN provides the Event-based Gateway which handles this scenario elegantly. This gateway is unique in BPMN, being the only gateway where the exit route can't immediately be determined. Instead, the process waits until the *first* of the subsequent events occurs.

In this pattern, we have two events after the gateway. A message event shows receipt of a response from the external party (here we've used an external pool for the customer). This represents our "happy path", and the process here continues with reviewing the response and dealing with it as required.



The other event is a timer event. This specifies the amount of time we would wait for a response. If this time elapses before the message event is triggered, the process follows this path. In our example, we send a chaser letter to the customer before the process hooks back into the gateway. Here we will wait again until one of the subsequent events is triggered.



If we aren't careful, our process could get stuck in an endless loop of chasing for a response – thankfully, there are various ways of preventing this. In our example, an interrupting boundary event on the chasing task acts as an escape route. If we have already sent 3 chasers, we stop what we're doing and instead close the customer's enquiry.

Other ways of ensuring an exit is available might include an extra event (maybe of the "conditional" type) following the gateway, or a review task checking previous chases followed by an Exclusive Gateway before sending a chaser. You should weigh-up which method describes your process most accurately.