In-House Training

WORKFLOW

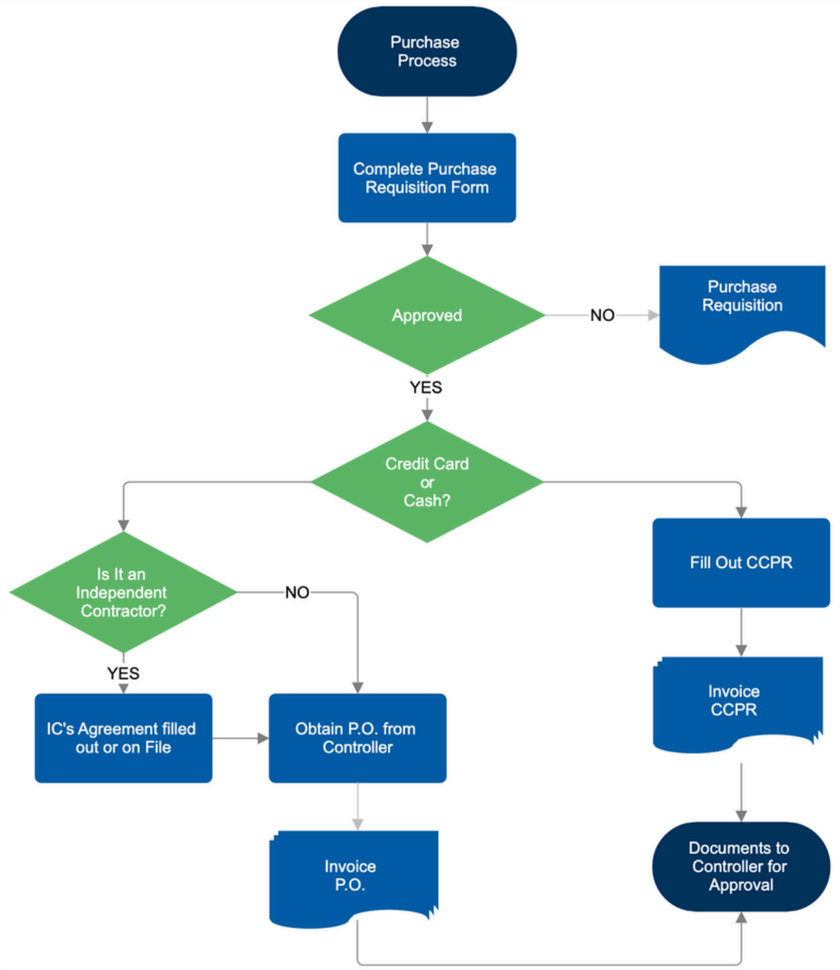
13 August 2024

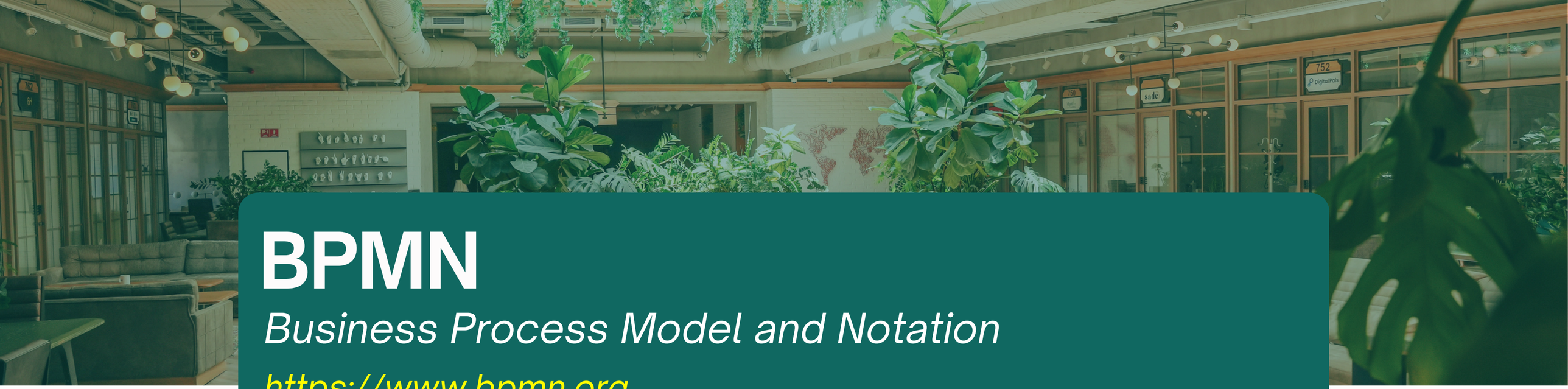
9.00-12.00 @Strategic Room

Course Outline

- ทำความรู้จักกับ BPMN 2.0 Diagram
- Notation ที่จำเป็นในการสร้าง Work Flow อย่างง่าย
- Learning by examples (Camunda)
- การติดตั้งโปรแกรม (PC, Browser)
- การสร้างไฟล์งานและการบันทึกบน Cloud
- สอนใช้งานโปรแกรม การวาง ปรับแต่ง Notation

Basic Flow Chart





BPMN

Business Process Model and Notation

https://www.bpmn.org

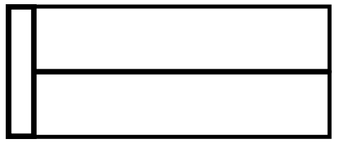
https://camunda.com/bpmn/reference

มาตรฐานสัญลักษณ์และการวาดรูปแสดงแบบจำลองกระบวนการทางธุรกิจ เป็นแผนภาพที่ช่วยอธิบาย กระบวนการทำงาน เพื่อให้คนทั่วไปเข้าใจได้ง่าย มีลำดับขั้นชัดเจนตั้งแต่ต้นจนจบ (end to end) รวมทั้ง สัญลักษณ์ที่ใช้วาดจะเป็นมาตรฐานสากล

Elements in BPMN

สัญลักษณ์ที่จำเป็นในการสร้าง Work Flow ด้วย BPMN

01

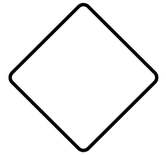


PARTICIPANTS

02

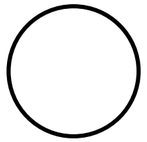
ACTIVITIES

03



GATEWAYS

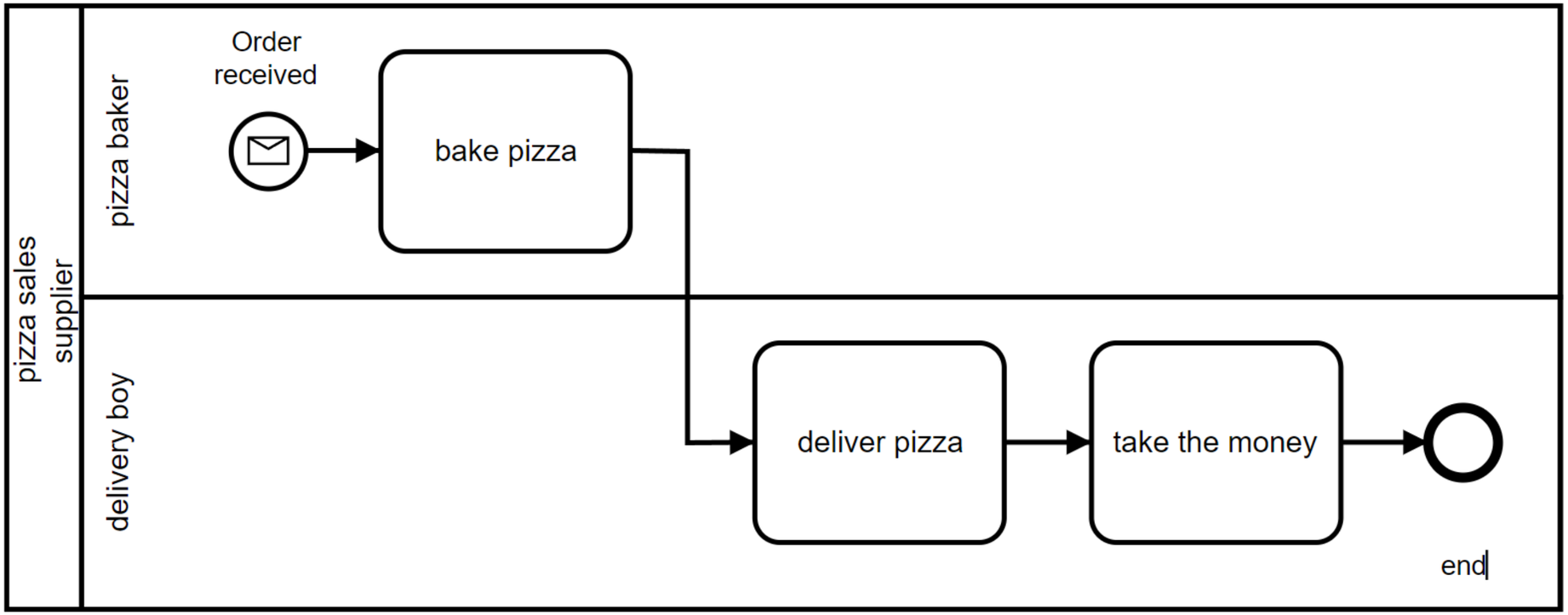
04

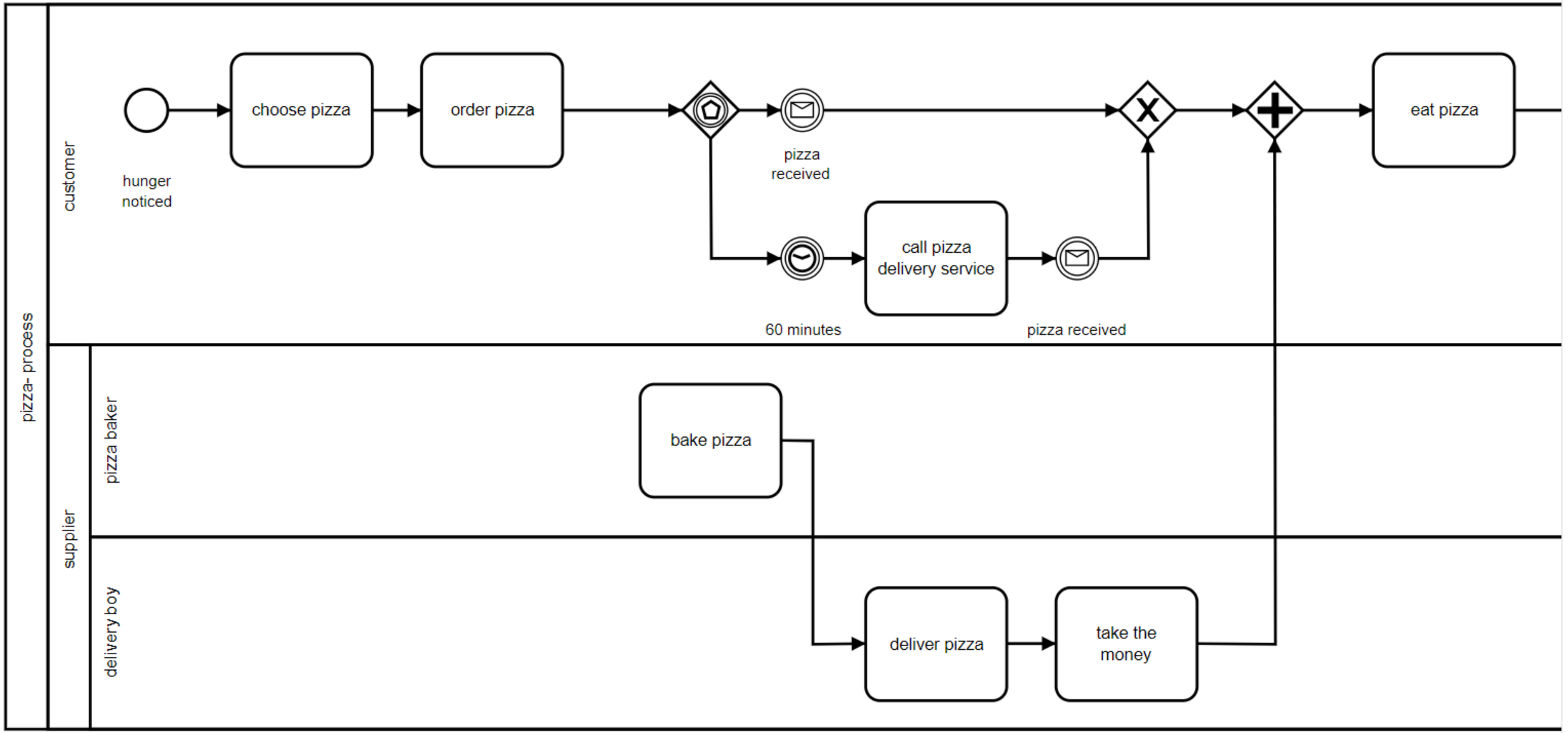


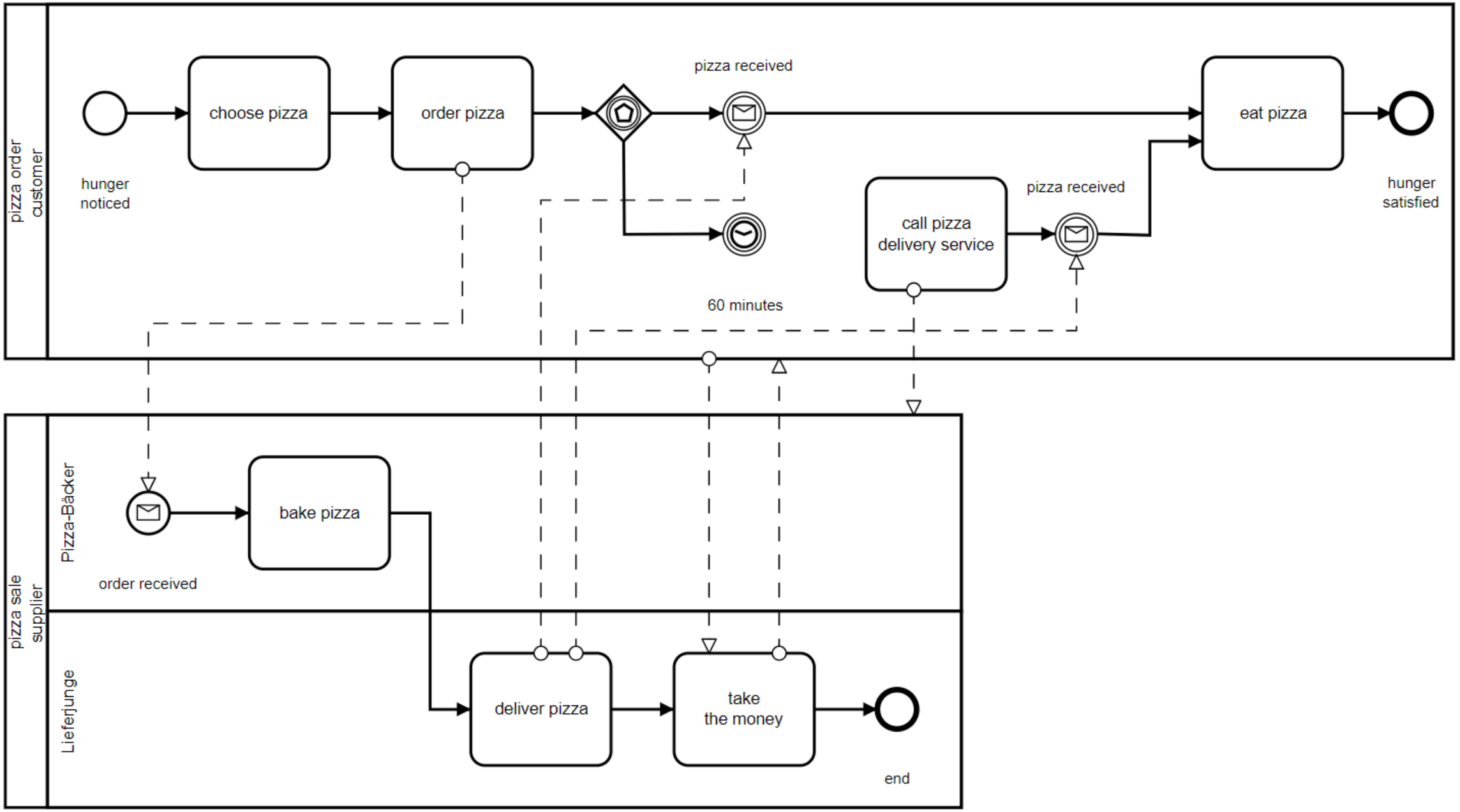
EVENTS

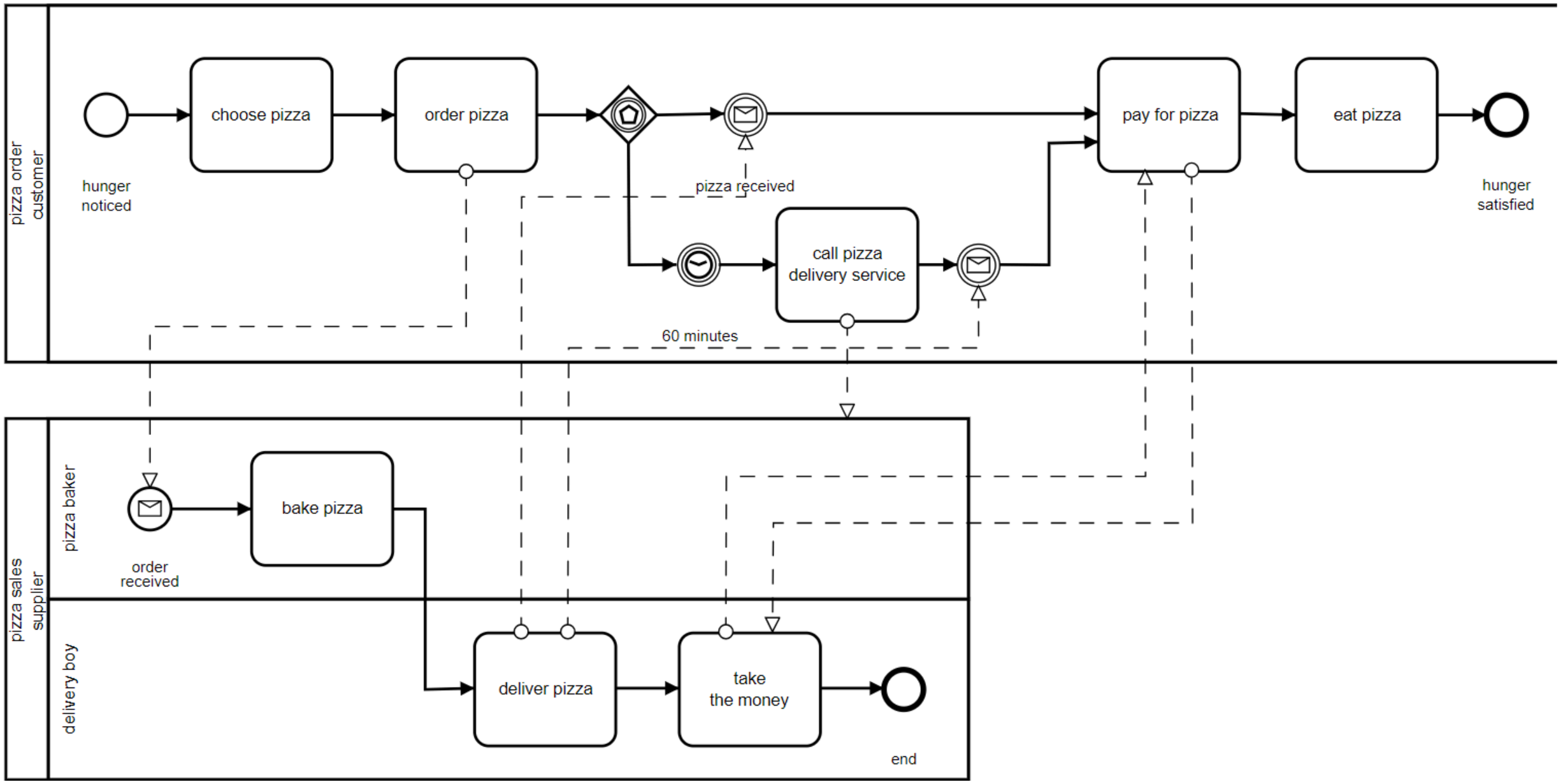
Participants

Pools & Lanes

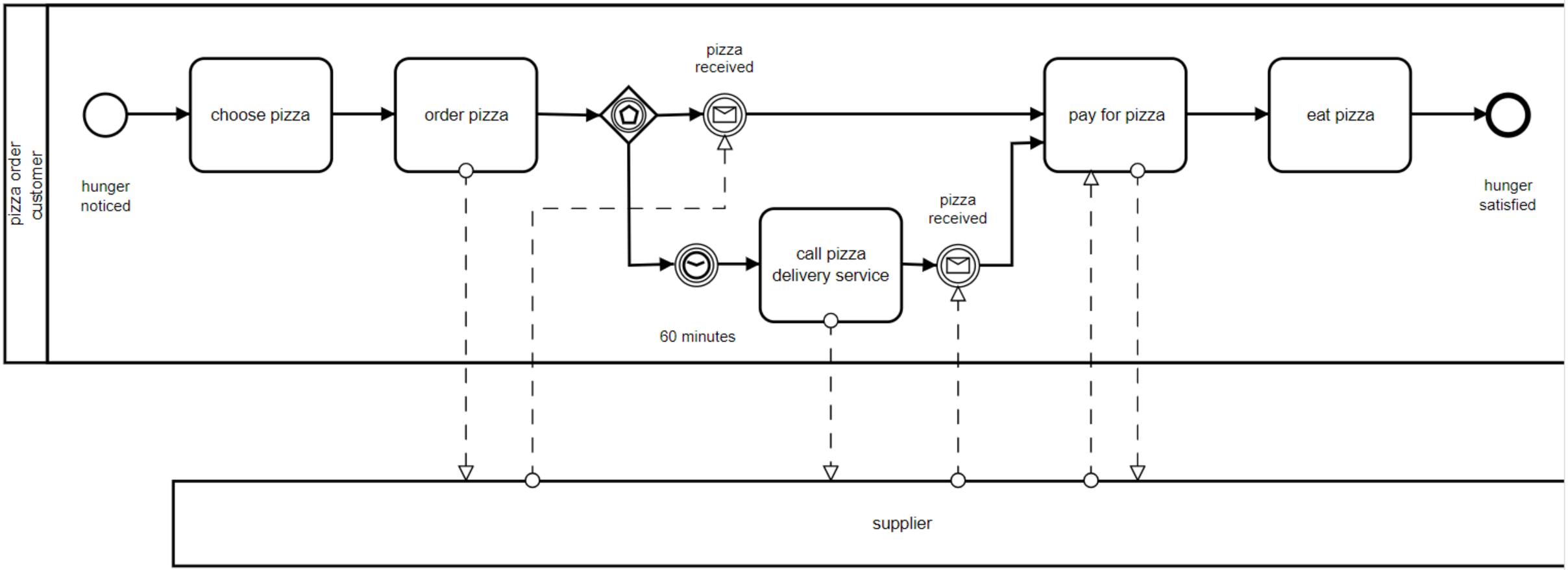

pizza sales supplier
pizza baker
delivery boy
Order received
bake pizza
deliver pizza
take the money
end


pizza- process
customer
supplier
pizza baker
delivery boy
hunger noticed
choose pizza
order pizza
pizza received
call pizza delivery service
60 minutes
pizza received
eat pizza
bake pizza
deliver pizza
take the money


pizza order customer
choose pizza
order pizza
pizza received
eat pizza
hunger noticed
hunger satisfied
call pizza delivery service
pizza received
60 minutes
pizza sale supplier
Pizza-Bäcker
bake pizza
order received
Lieferjunge
deliver pizza
take the money
end


pizza order customer
choose pizza
order pizza
pay for pizza
eat pizza
hunger noticed
pizza received
hunger satisfied
call pizza delivery service
60 minutes
pizza sales supplier
pizza baker
bake pizza
order received
delivery boy
deliver pizza
take the money
end

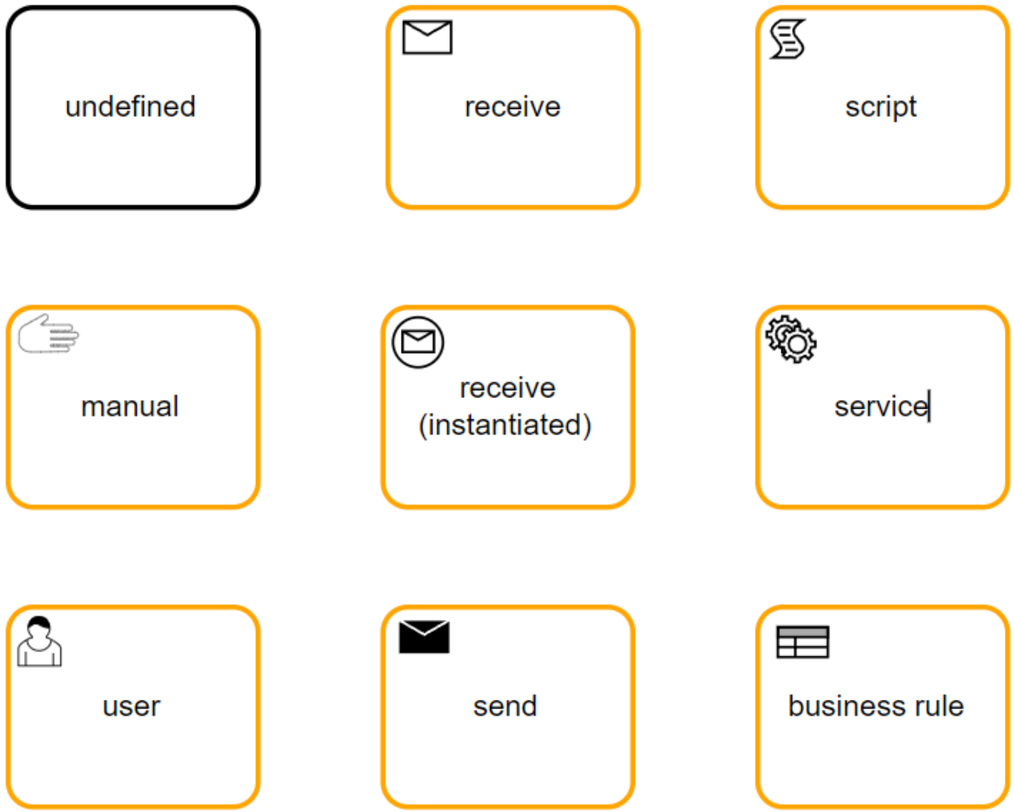
Collapsing Pools



Activities

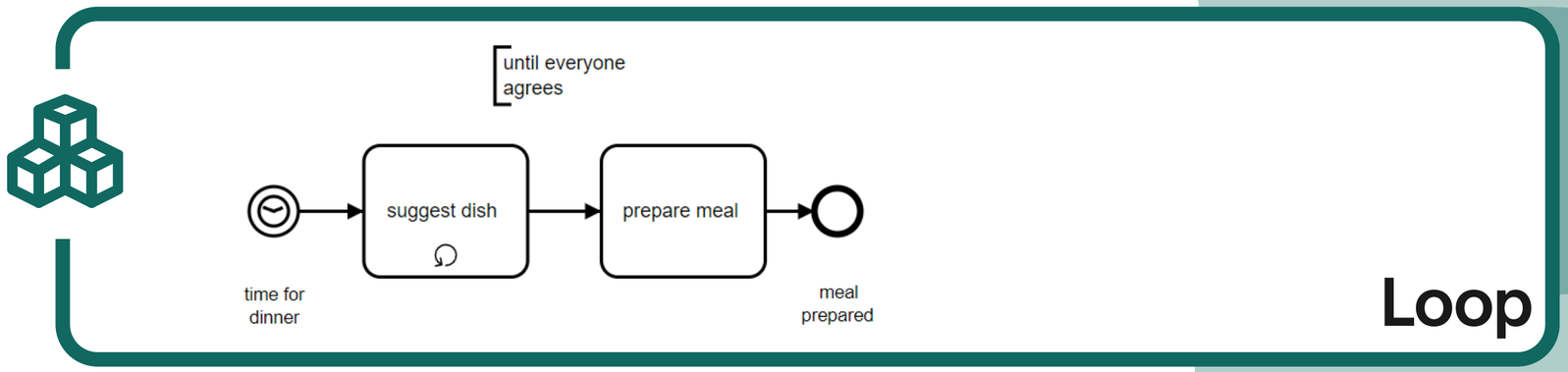
Task

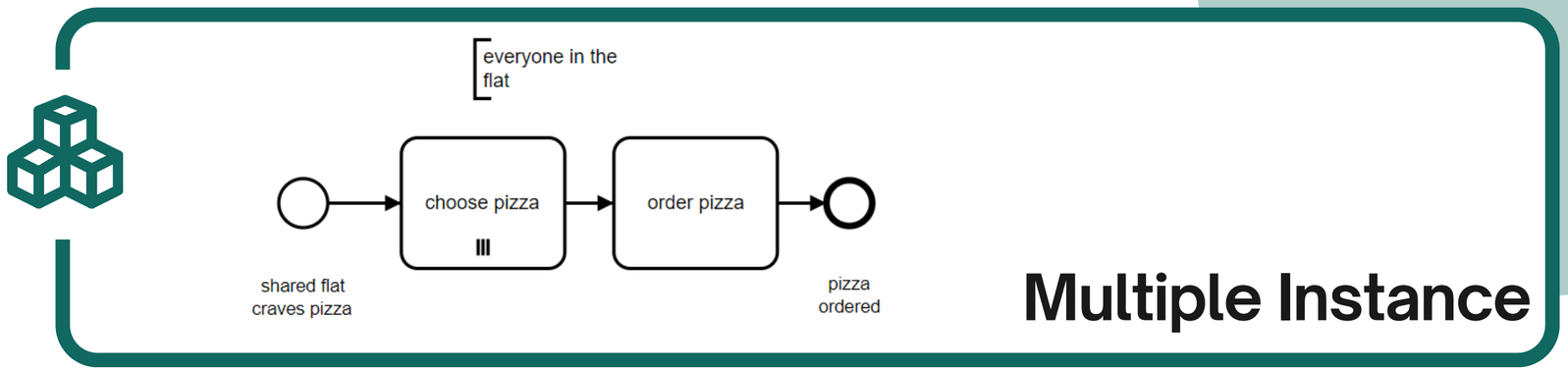
we have used only tasks of undefined types, though BPMN provides the opportunity to work with task types.

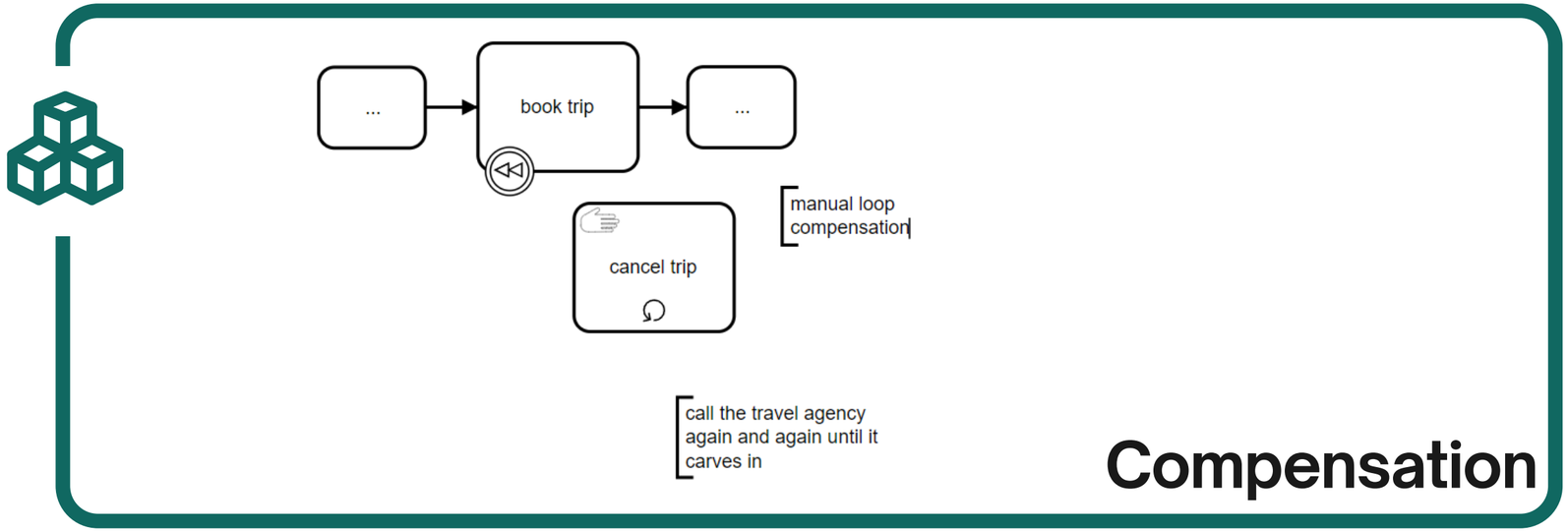


Task Markers

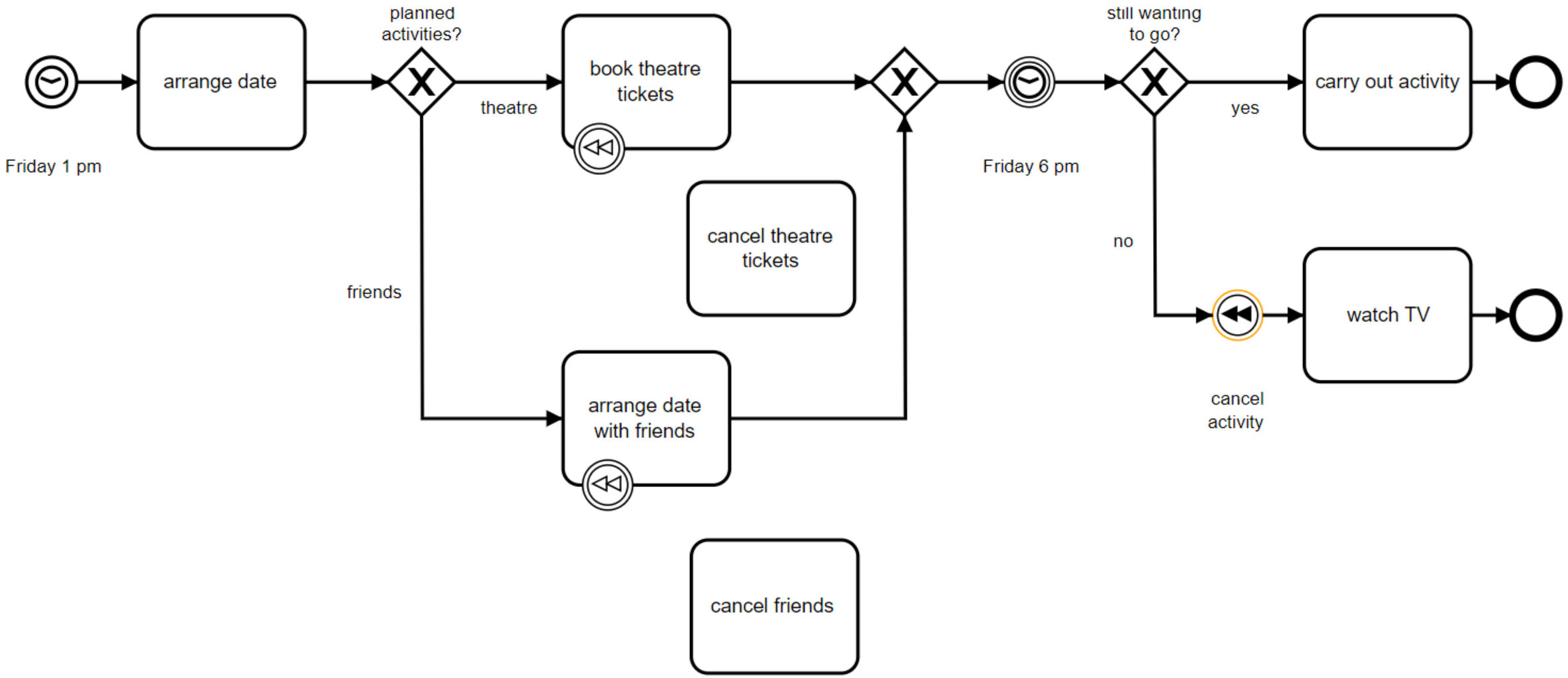
In addition to those various types of tasks, we can mark tasks as loops, multiple instances, or compensations. Markers can be combined with the assigned types.





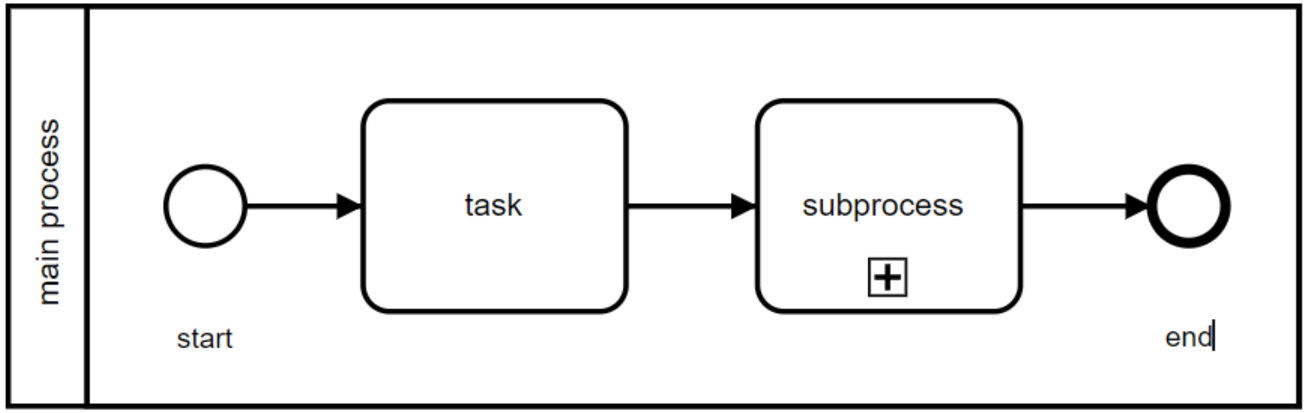


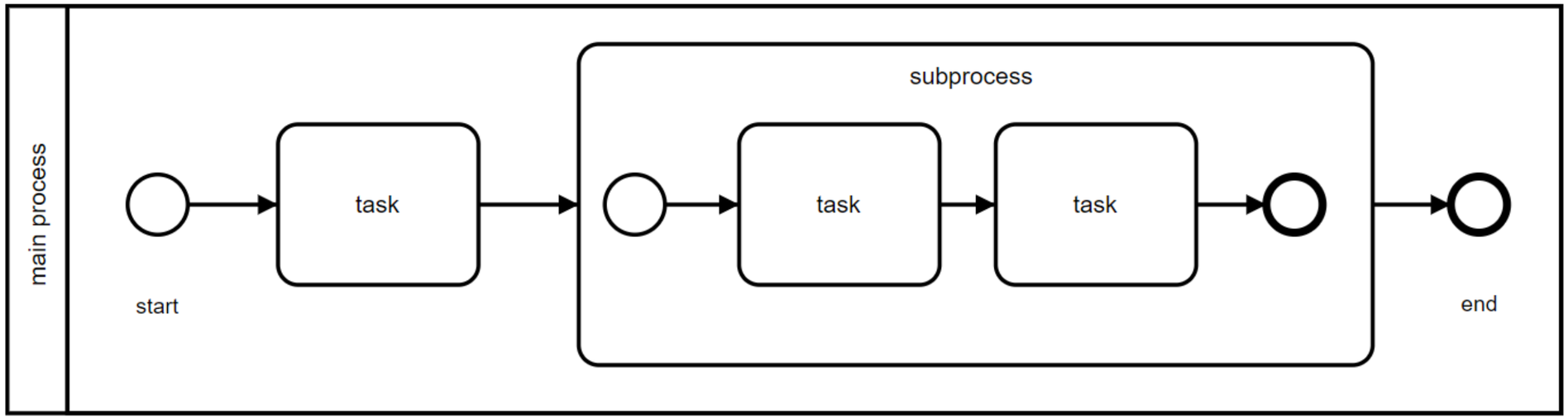
Compensation Task



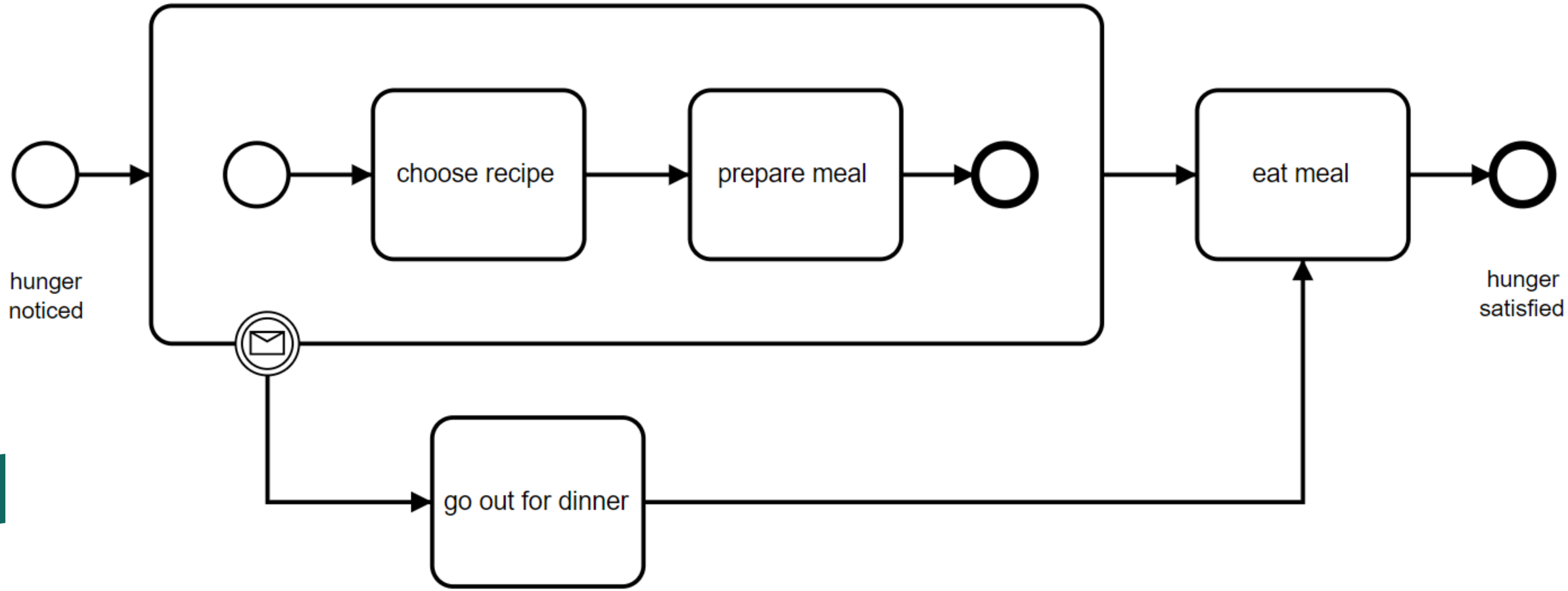
Subprocess

Encapsulate complexity

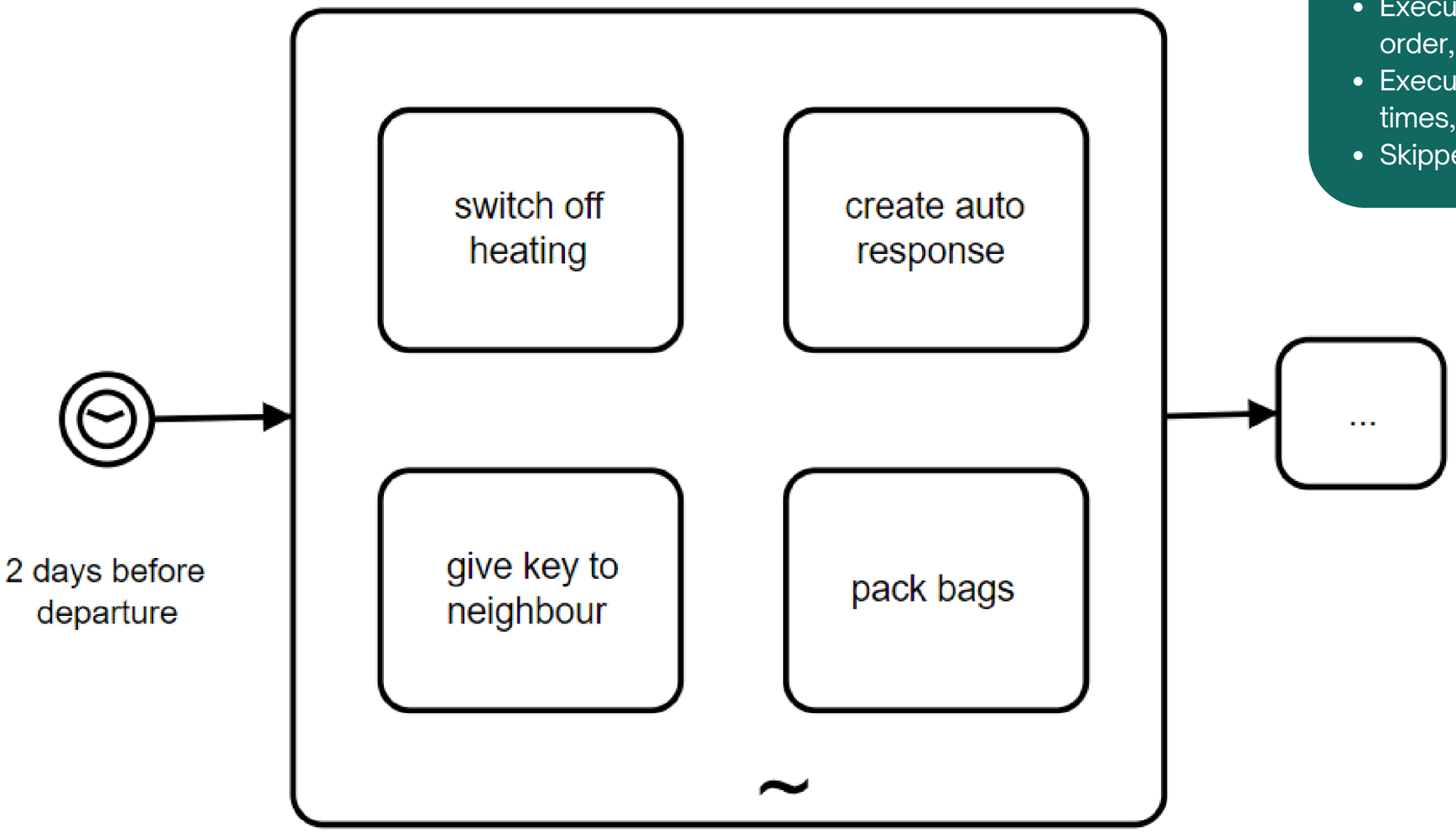




Attaching Events



Adhoc



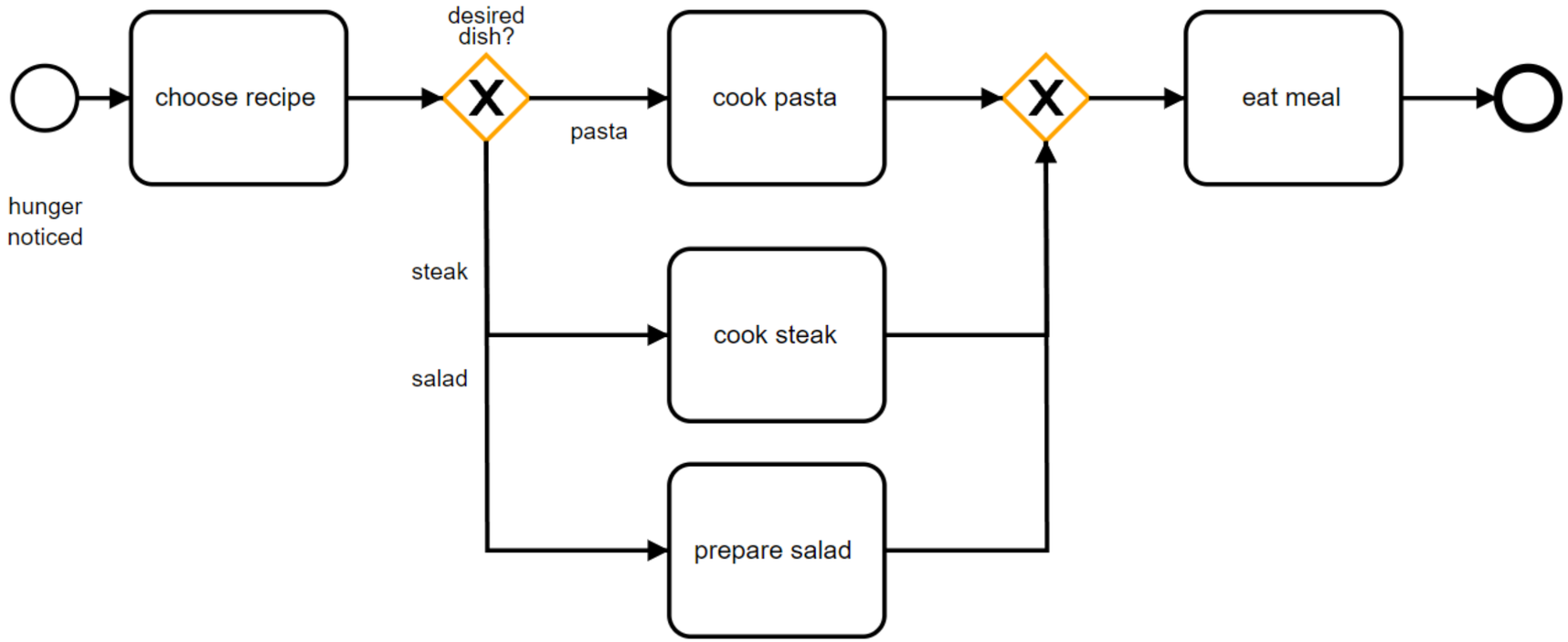
Key Concept

- Executed in any order,
- Executed several times, or
- Skipped.

Gateways

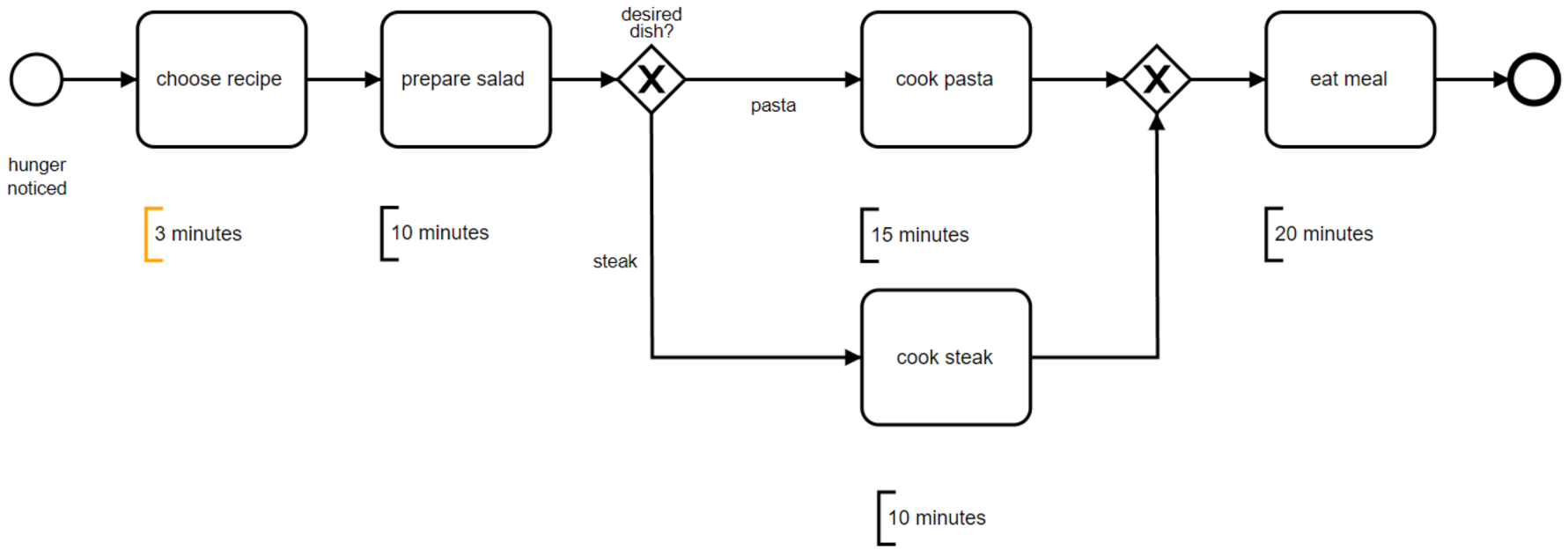
Data-based Exclusive Gateways

XOR Gateways



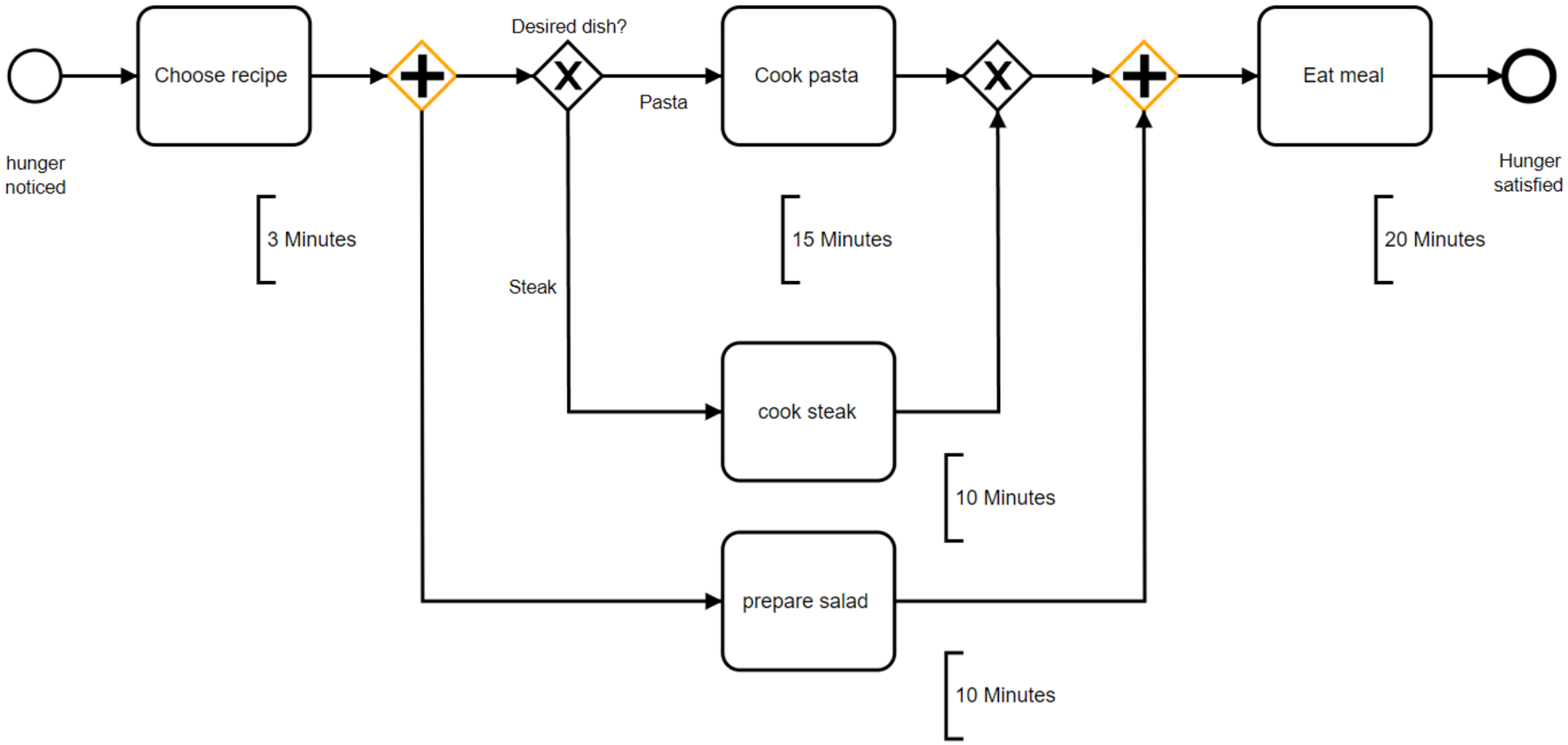
Parallel Gateways

AND Gateways



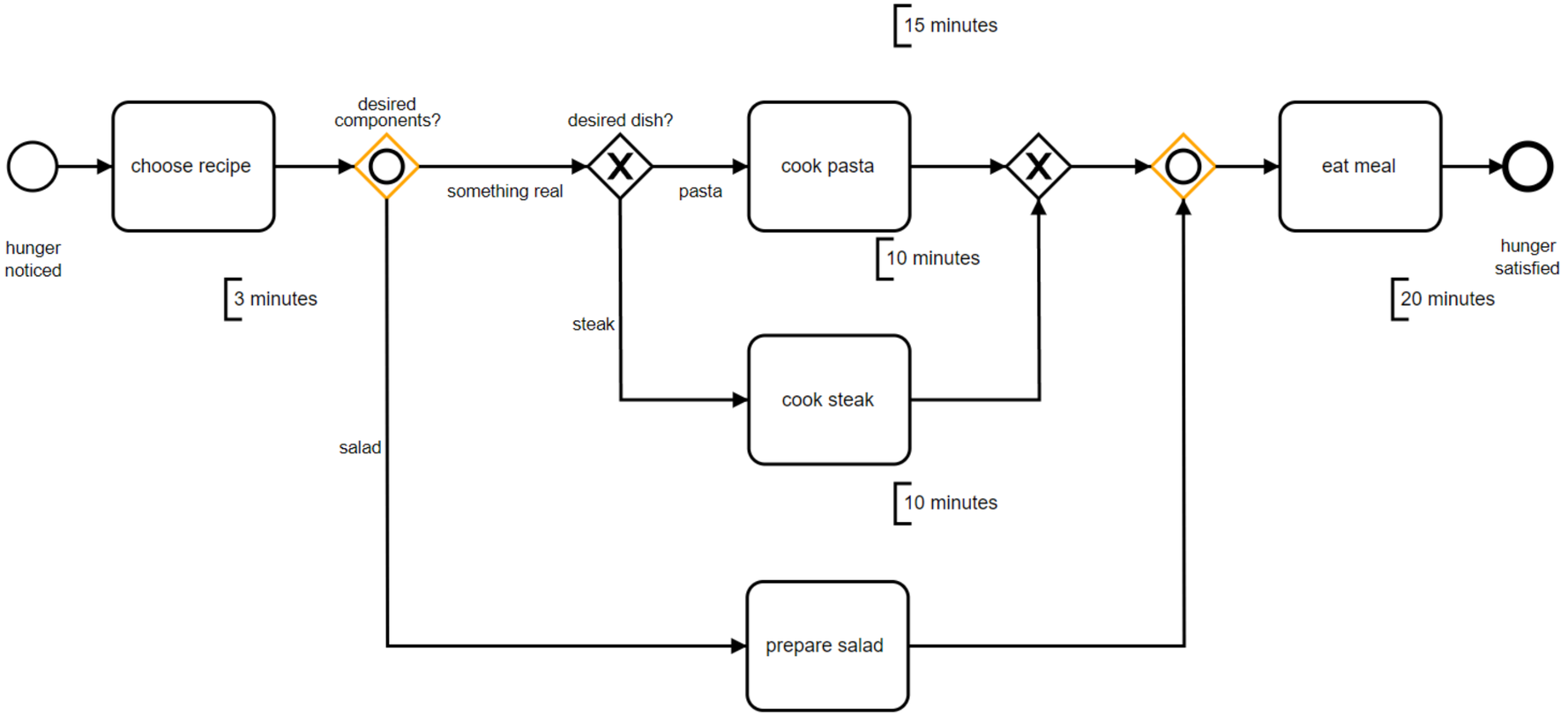
Parallel Gateways

AND Gateways

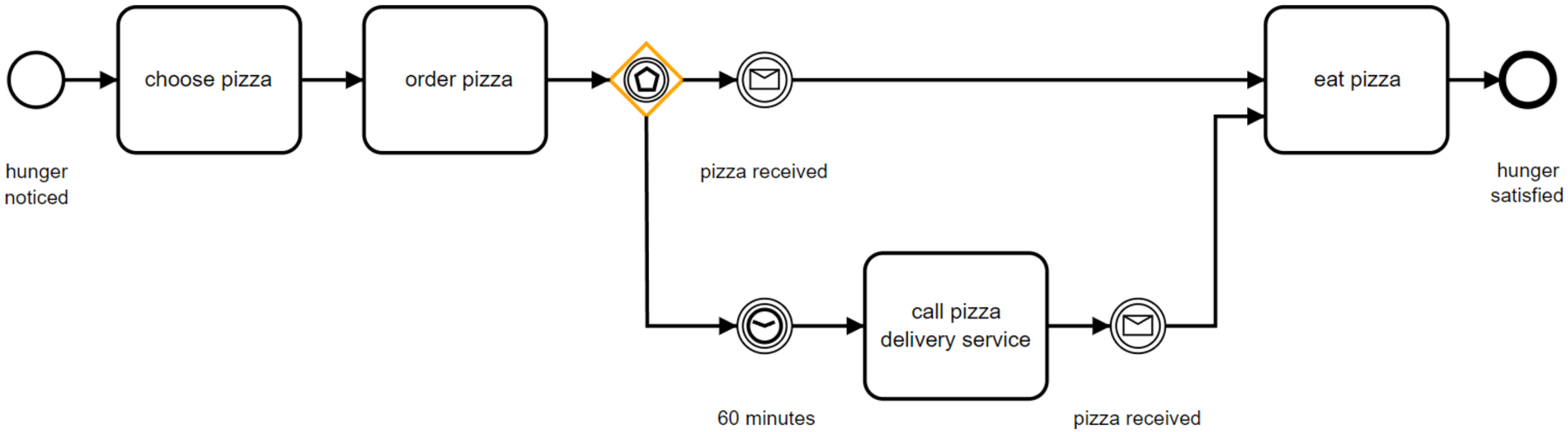


Data-based inclusive Gateways

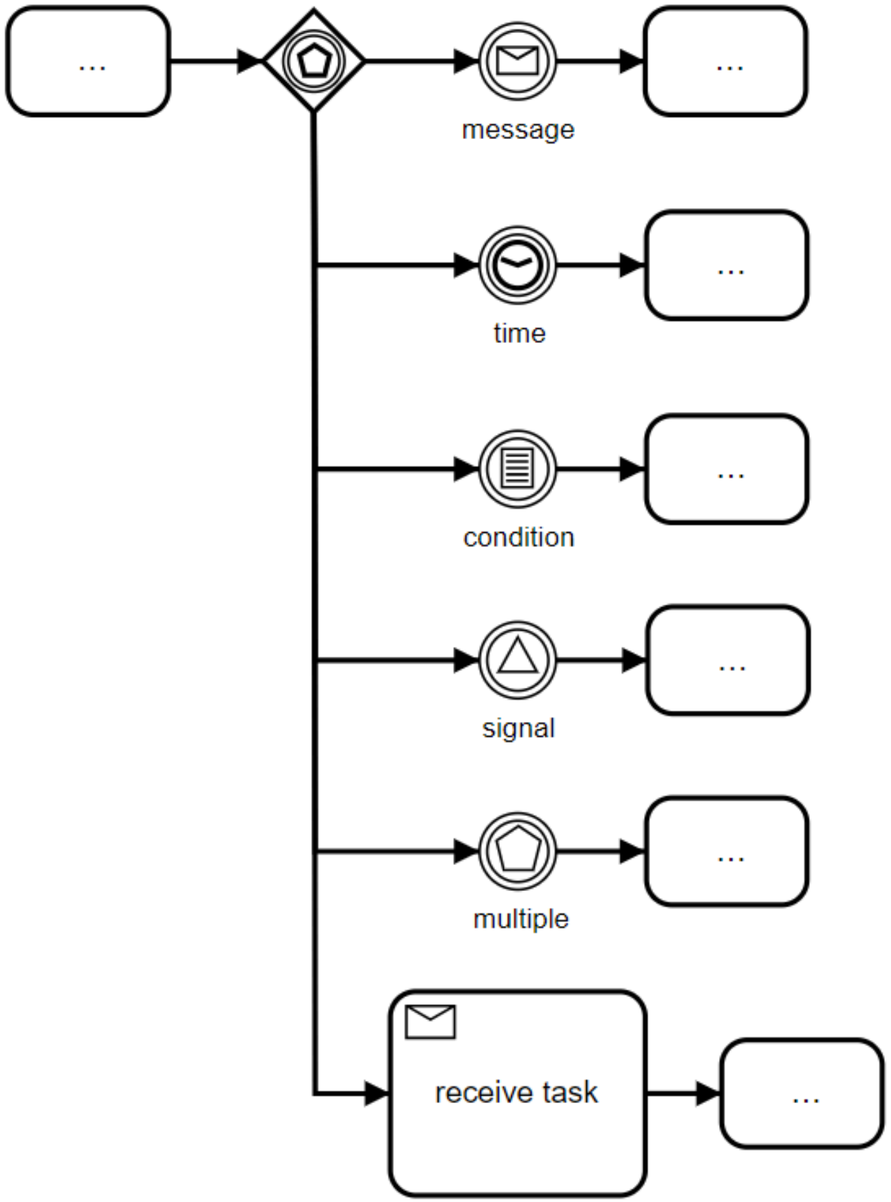
OR Gateways



Event-based Gateways



Event-based Gateways



Events

START

	Start			Intermediate				End
Type	Normal	Event Sub process	Event Sub process non-interrupt	Catch	Boundary	Boundary non-interrupt	Throw	
None								
Message								
Timer								
Conditional								
Link								
Signal								
Error								
Escalation								
Termination								
Compensation								
Cancel								
Multiple								
Multiple Parallel								

END

	Start			Intermediate				End
Type	Normal	Event Sub process	Event Sub process non-interrupt	Catch	Boundary	Boundary non-interrupt	Throw	
None								
Message								
Timer								
Conditional								
Link								
Signal								
Error								
Escalation								
Termination								
Compensation								
Cancel								
Multiple								
Multiple Parallel								

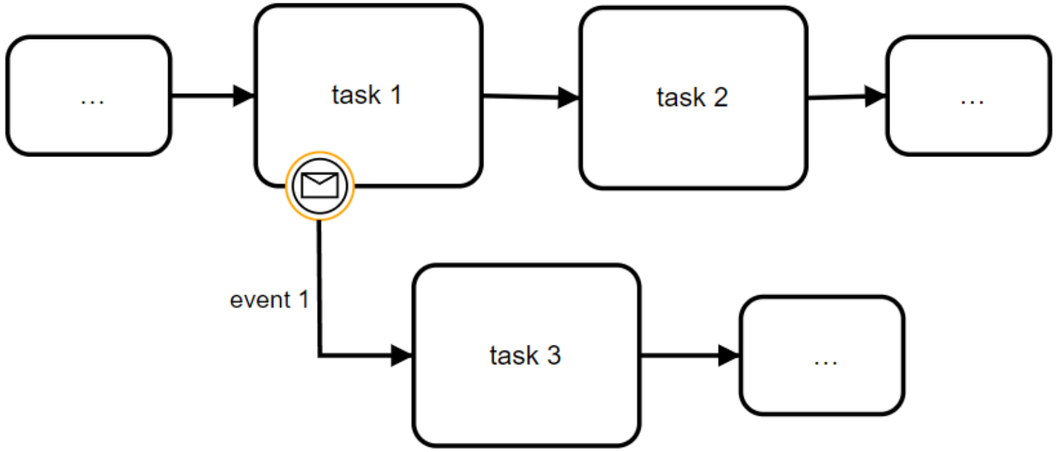
จำง่าย ๆ สไตล์ตั้มขั้นเทพ

เริ่ม - ใช้วงกลมเส้นเดียว
กลางทาง - ใช้วงกลมสองวง
จบ - ใช้วงกลมเส้นเดียวแต่หนา ๆ

ไม่ขัดจังหวะ - มีเส้นปะ

Throw Event - ไอคอนระบายสี
Catch Event - ไอคอนไม่มีสี

Boundary Event



Explanation

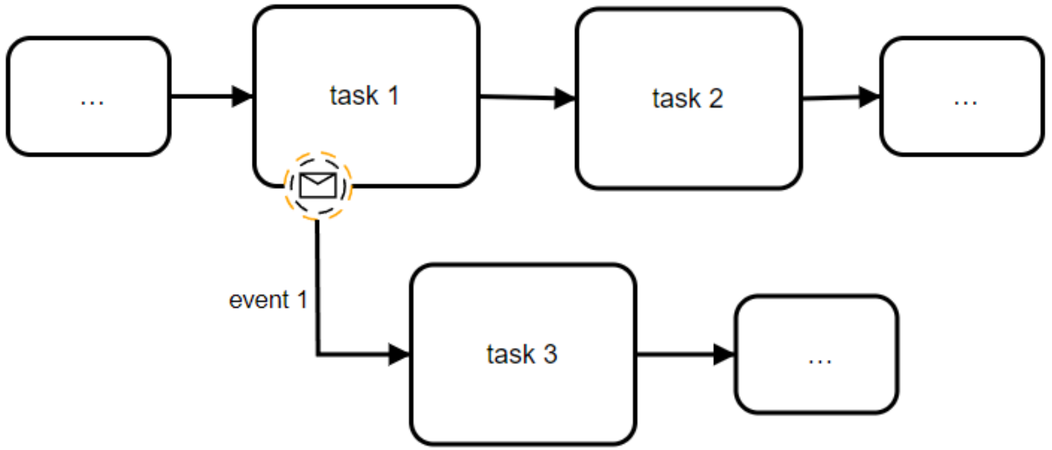
If this event occurs while task 1 is active, task 1 will be canceled and task 3 completed instead.

Boundary Event

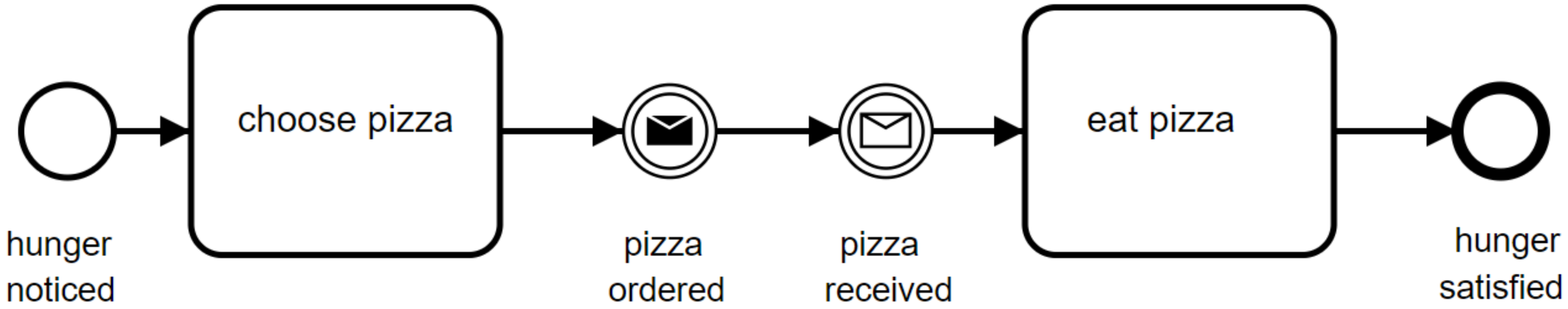
(not interrupting)

Explaination

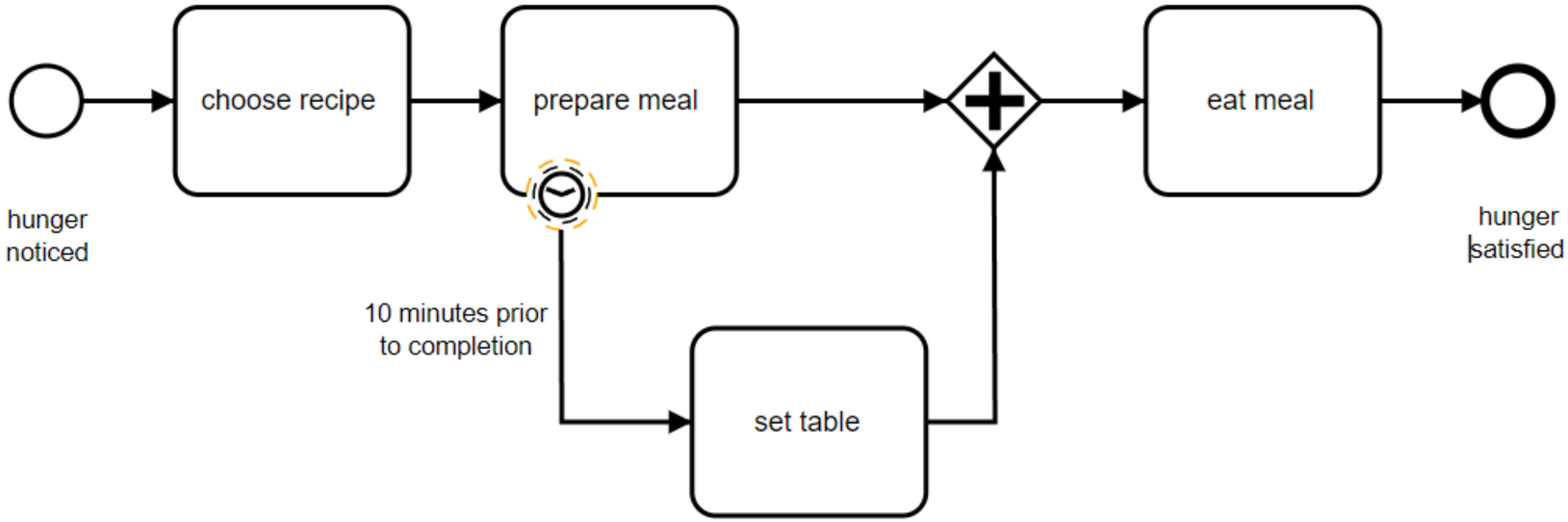
If this event occurs while task 1 is active, task 1 will still get completed and task 3 will also get completed



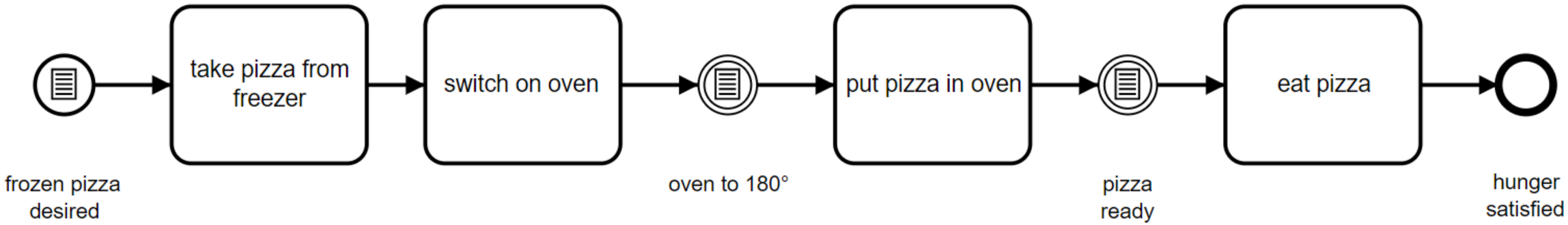
Catch/Throw Events



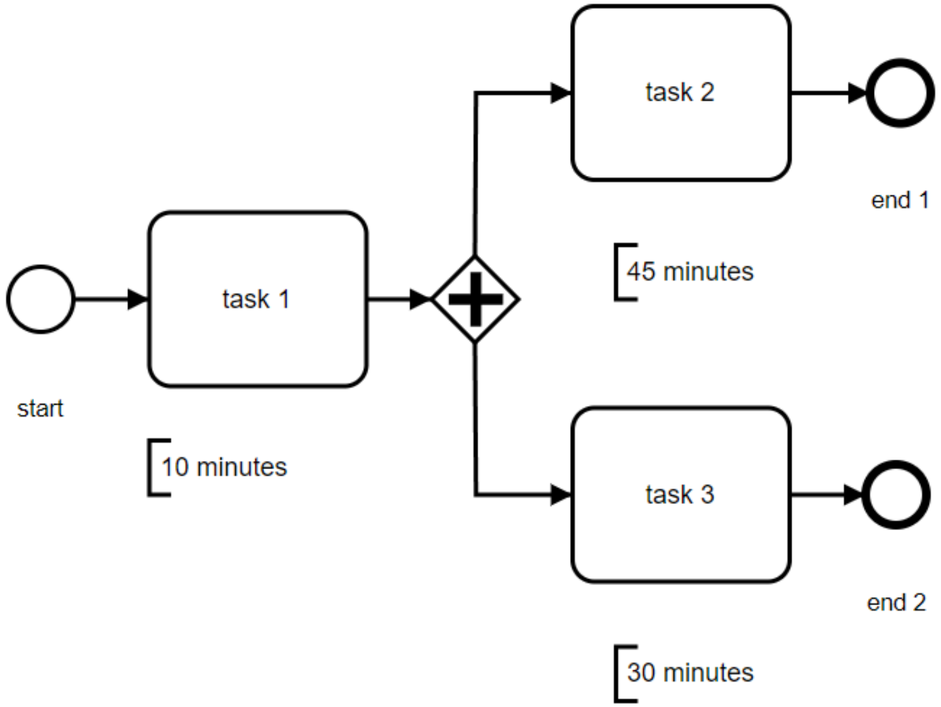
Timer Event


choose recipe
prepare meal
eat meal
hunger noticed
hunger satisfied
10 minutes prior to completion
set table

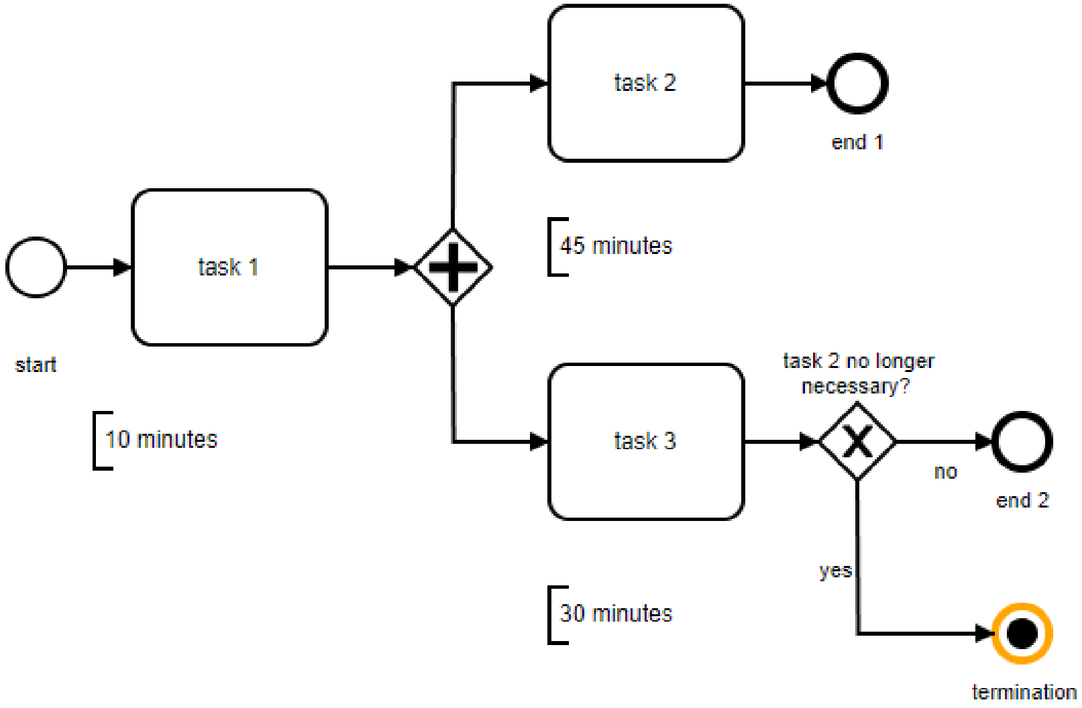
Conditional Event



Termination Event



What happens if we already know that, after having completed task 3, task 2 has become redundant? This is a frequent situation with parallel task executions related to content. In such cases, we can apply the pattern shown in here:



POL CMU
CHIANG MAI UNIVERSITY

THANK YOU

POLSCI CMU

+085-7149493

sarat.khattiya@cmu.ac.th

www.pol.cmu.ac.th

Faculty of Political Science
and Public Administration,
Chiang Mai University

Example

https://stang.sc.mahidol.ac.th/about/workflow.php

https://stang.sc.mahidol.ac.th/pdf/km/Blueprint_CT.pdf
https://stang.sc.mahidol.ac.th/pdf/km/25611203_varasaya.pdf