Advanced BPMN Patterns

CAMUNDA COMMUNITY SUMMIT 2023

About Me

CCS 2023

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Trainer & Consultant
Camunda

- ❤ BPMN
- Studied *Computer Science (B.Sc.)* & *Information Systems Engineering (M.Eng.)*
- Passionate coder since youth
- Worked at FH Aachen as a lecturer & research assistant
- Joined Camunda in 2021

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A pattern is a regularity in the world, in human-made design, or in abstract ideas. As such, the elements of a pattern repeat in a predictable manner.

Achraf Garai
“What are Design Patterns?“

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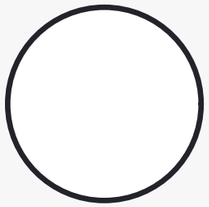
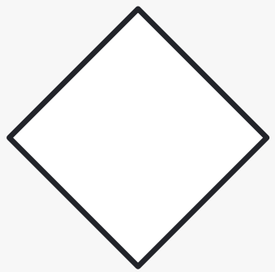


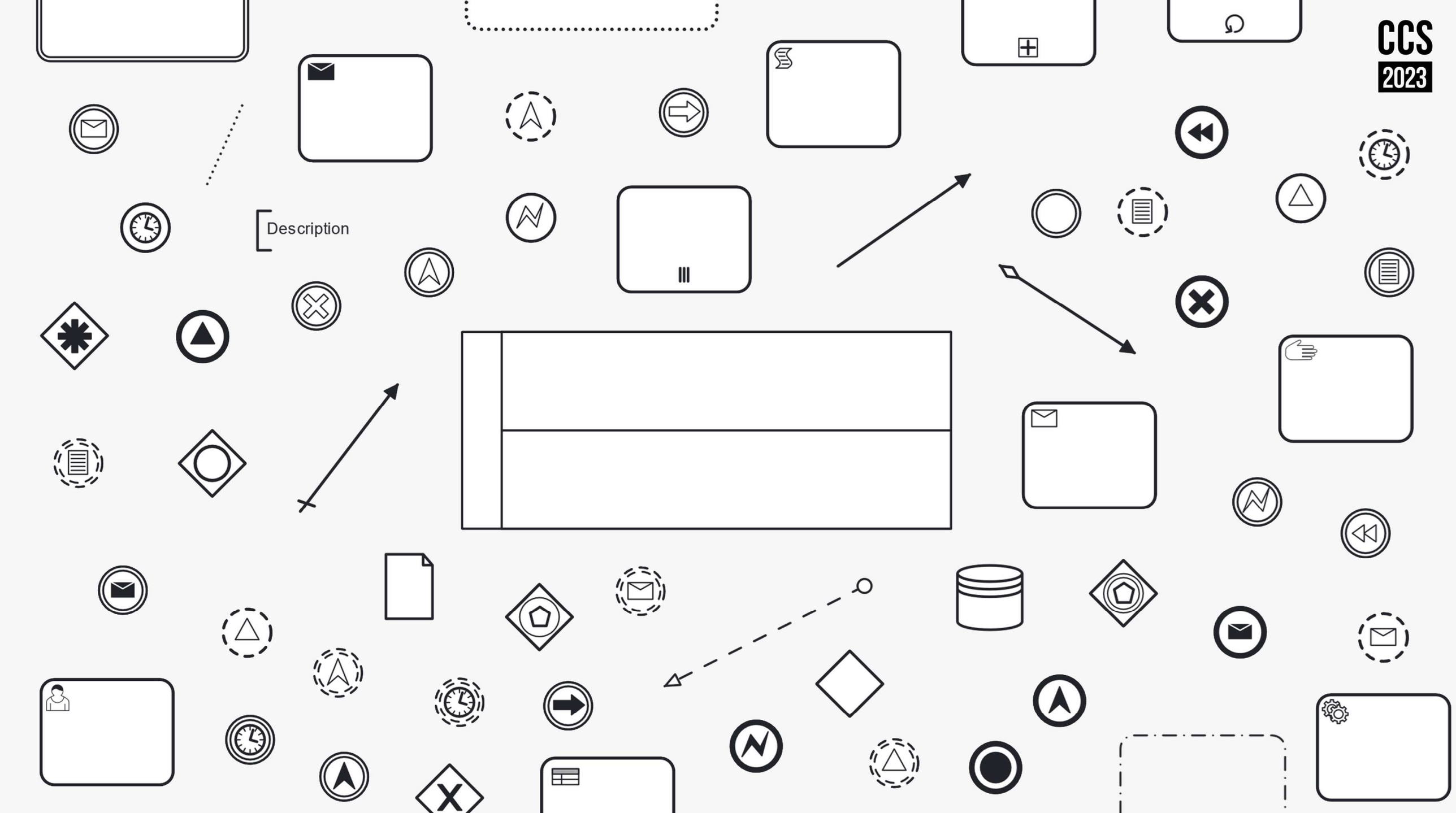
Events

Activities



Gateways

Sequence Flows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Description

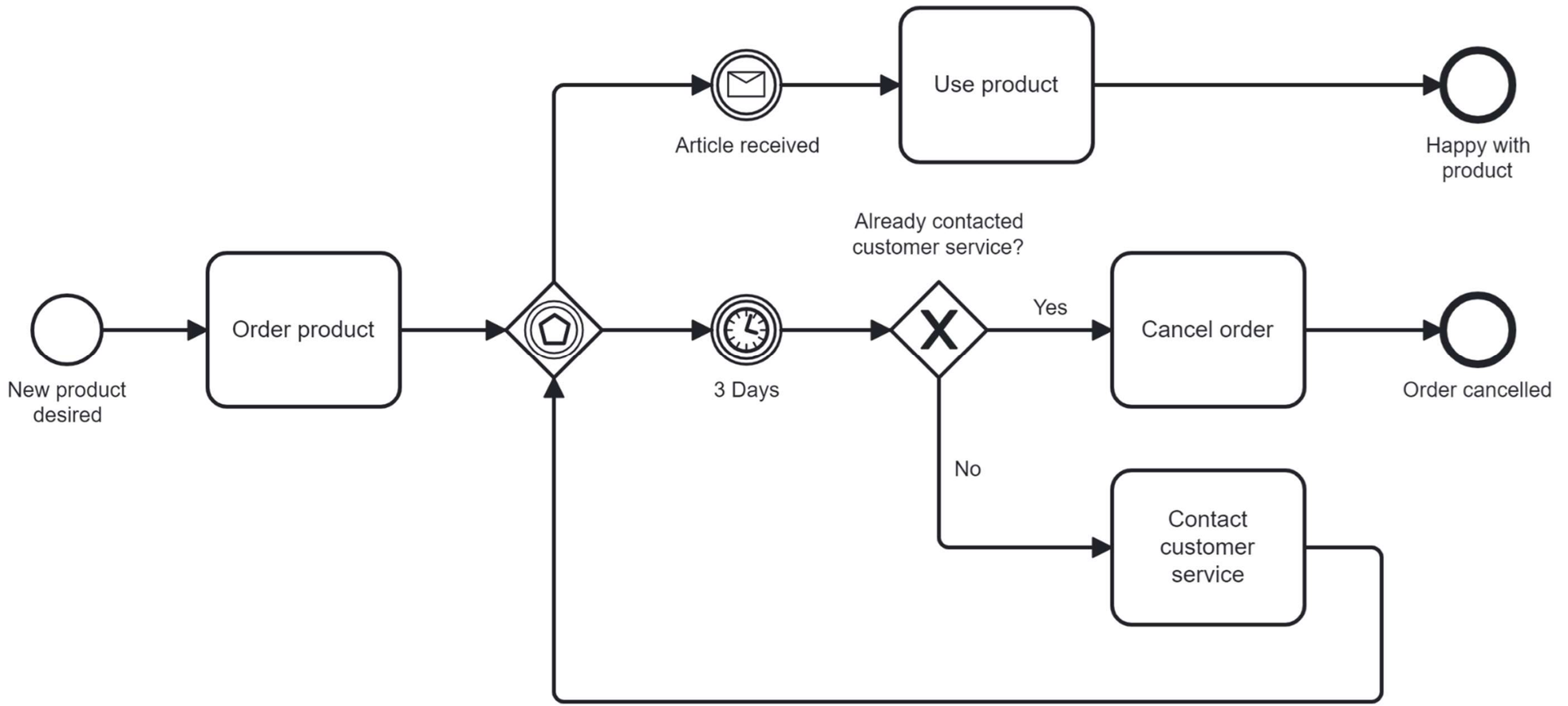
Product Order

A customer wants to order a new product

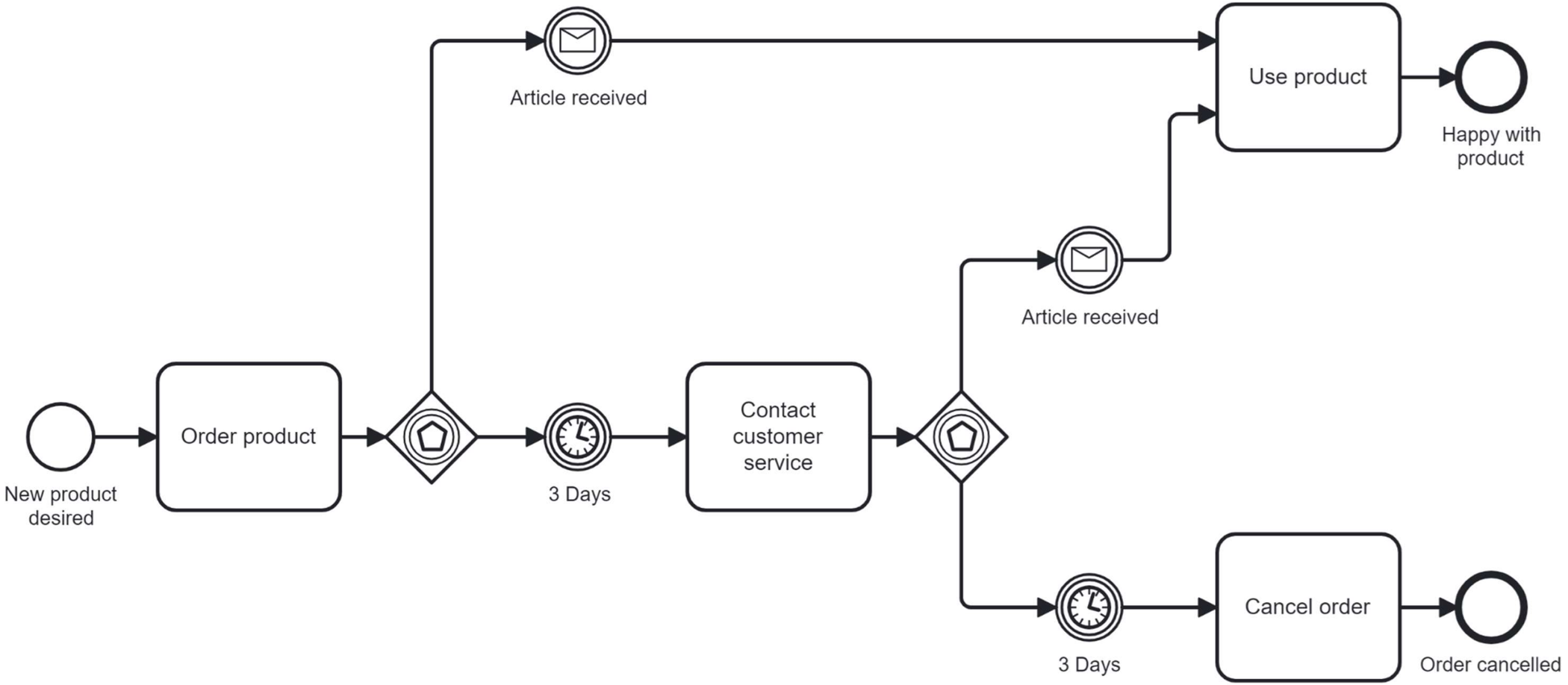
After 3 days without receiving the product they contact the customer service

After 6 days without receiving the product they cancel the order

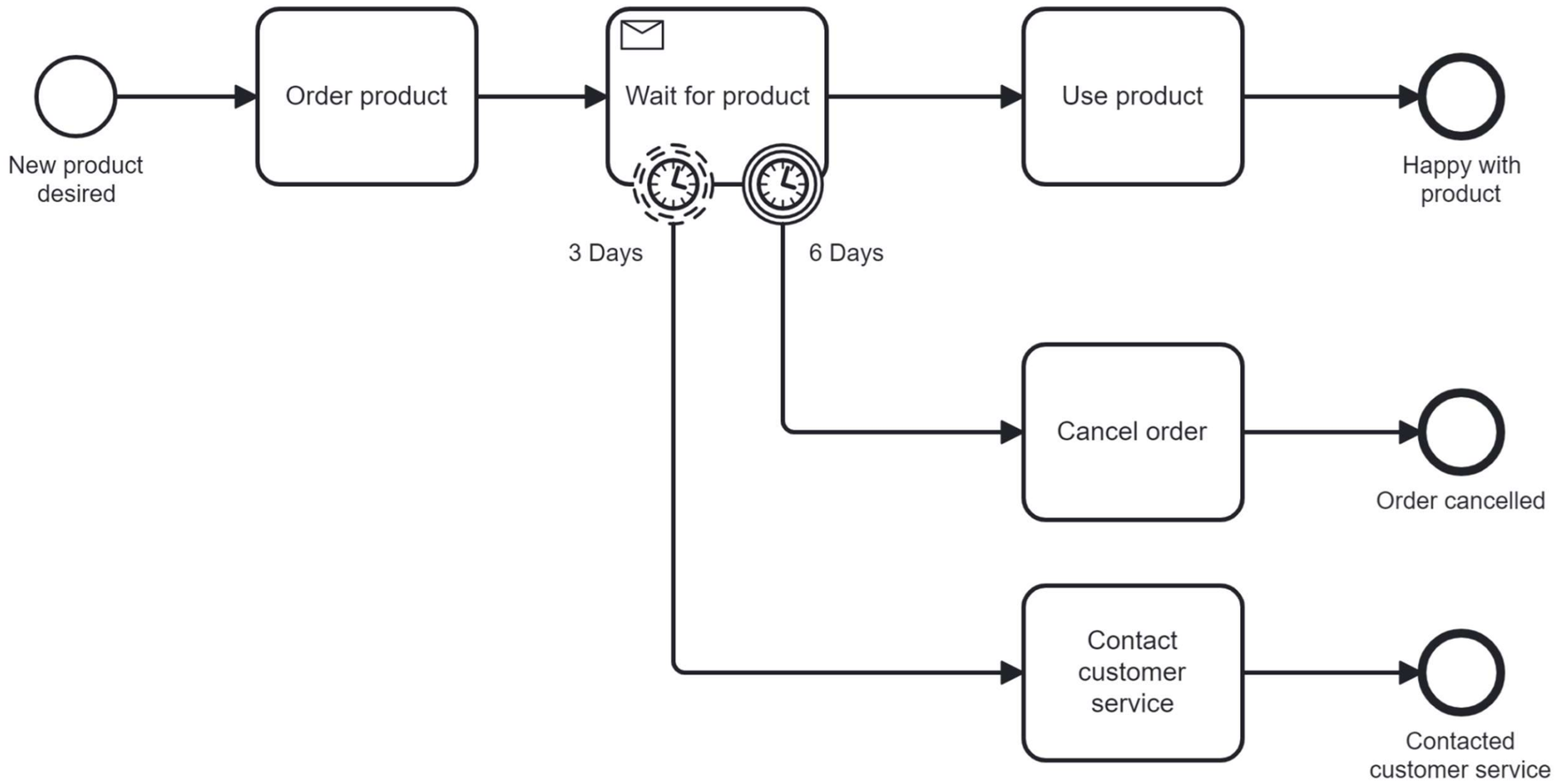
Product Order | Event-based Loop



Product Order | Two-Stage EBG



Product Order | Boundary Events



Broadband Expansion

An internet provider allows cities to flexibly expand their internet infrastructure

At any point new households can sign up

Contract has a maximum threshold of households to be connected

Contract runs out after a certain amount of time

Broadband Expansion | Event Subprocess

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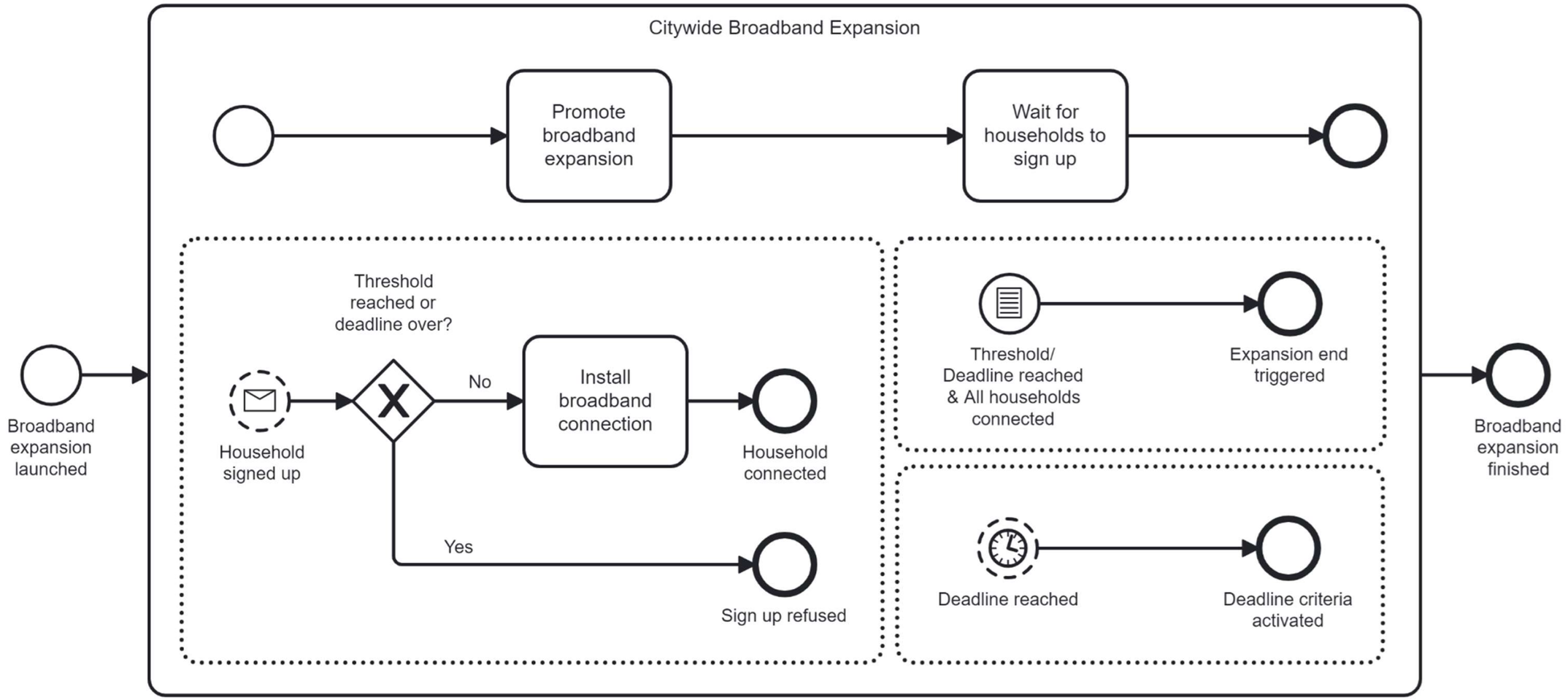
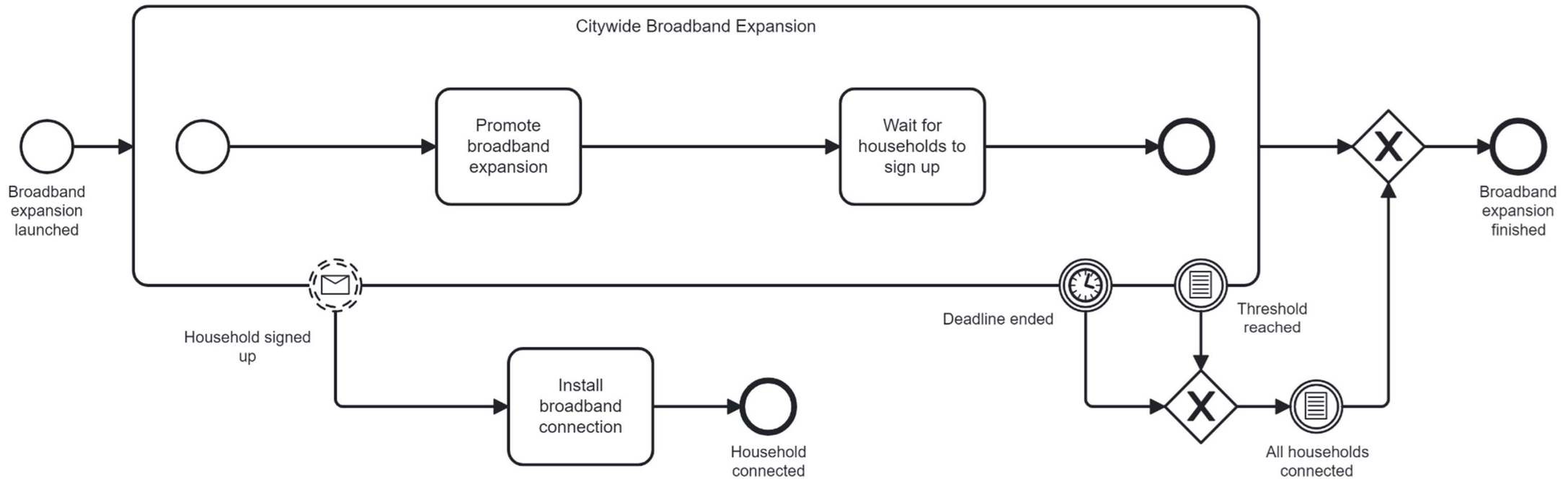


Broadband Expansion | Boundary Events

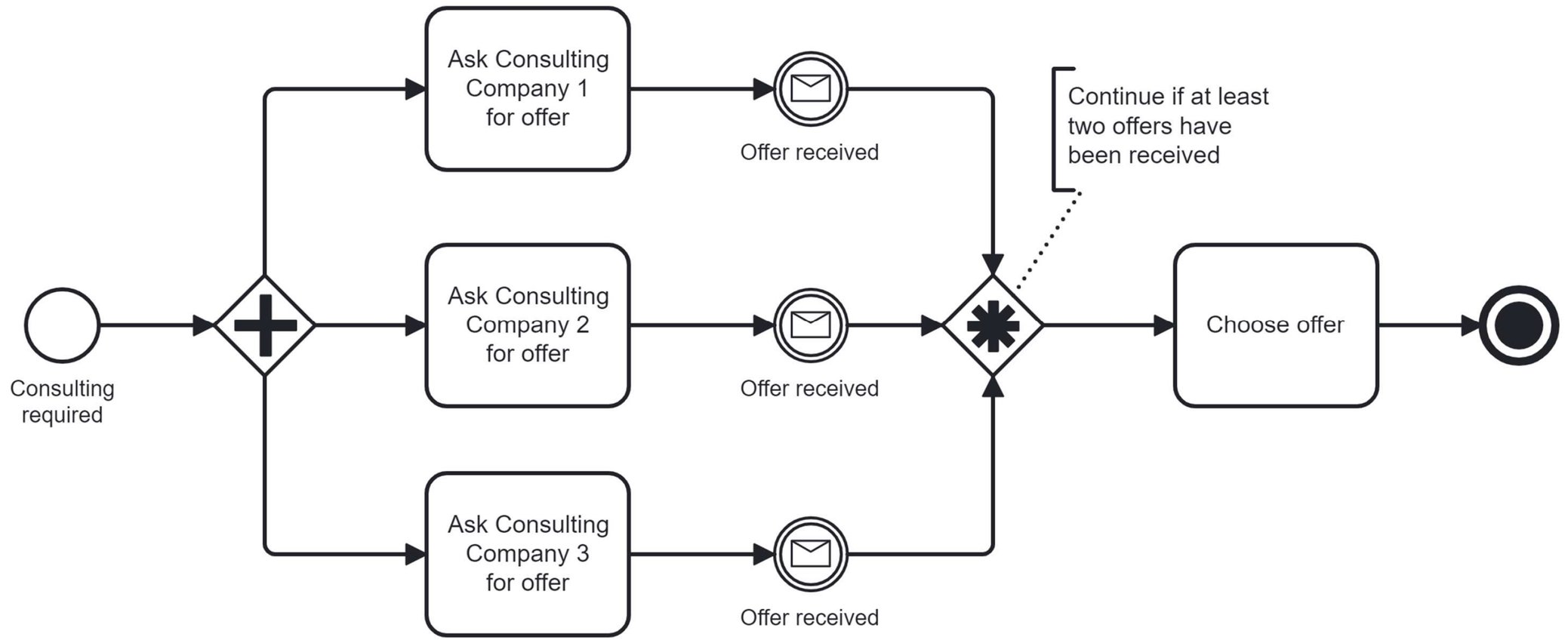


A complex situation...

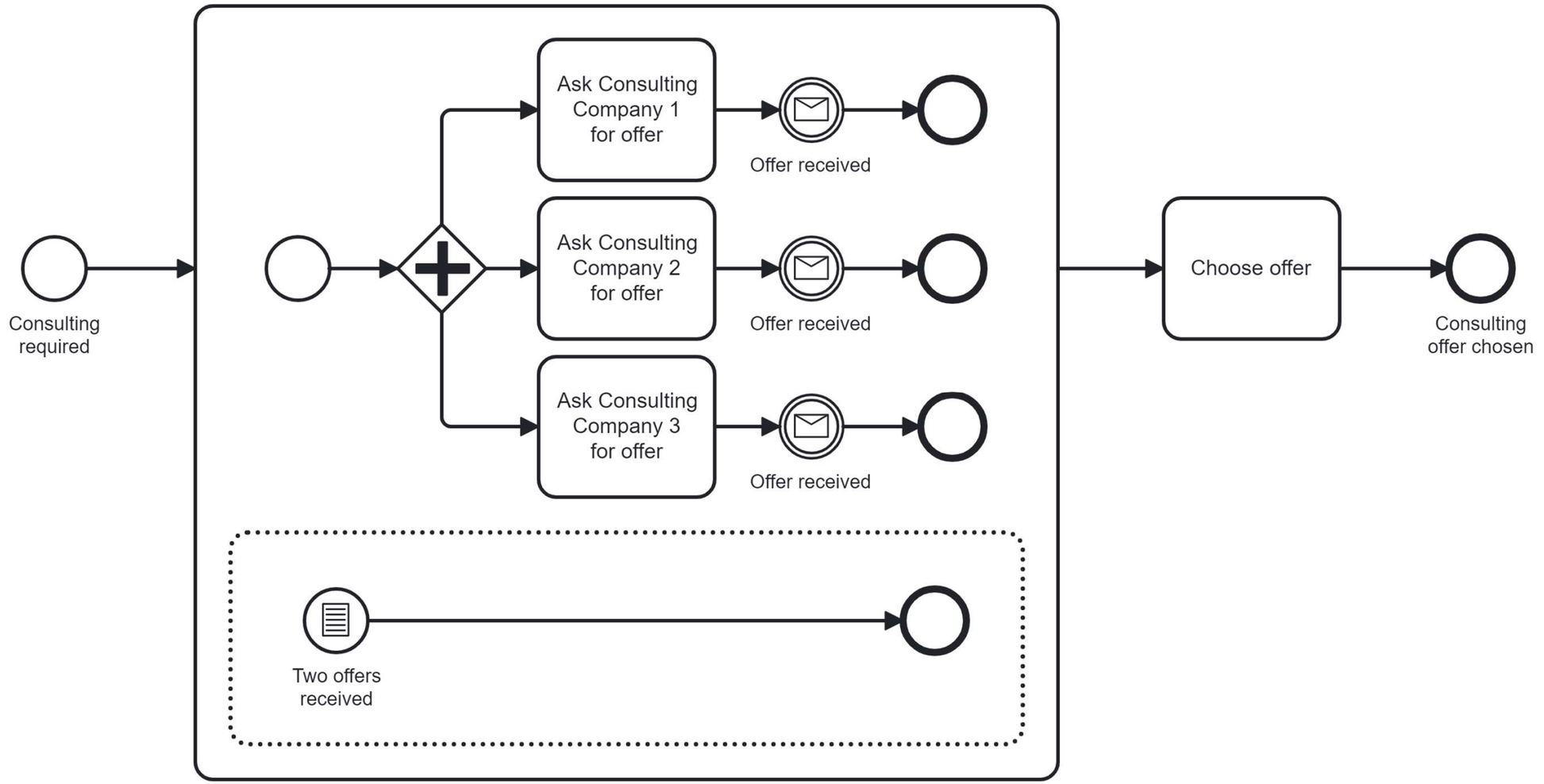
- A company often needs external consulting
- Per convention three offers need to asked for
- Once two offers have been received an offer is chosen

A Complex Situation | Complex Gateway

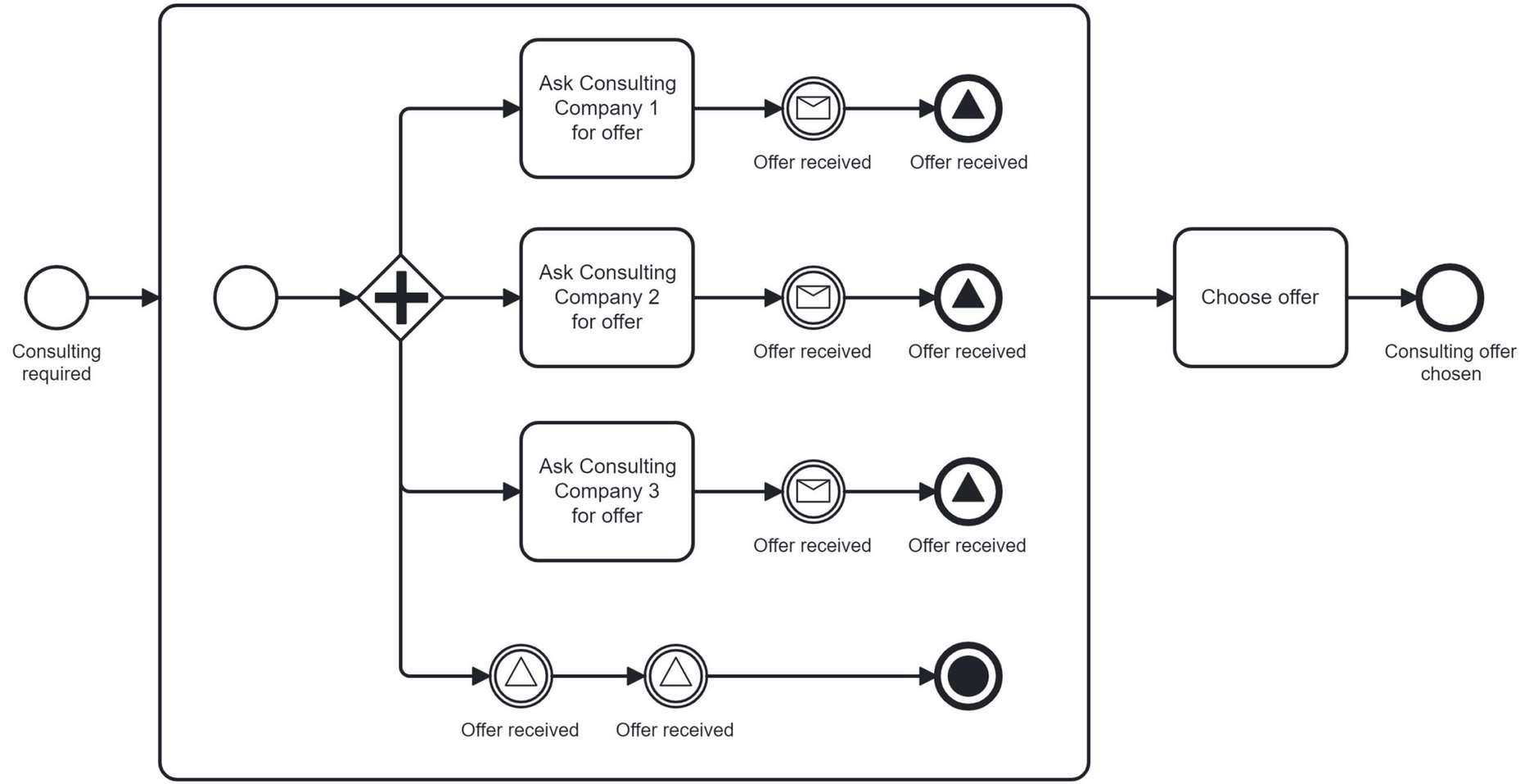
A Complex Situation | Complex Gateway



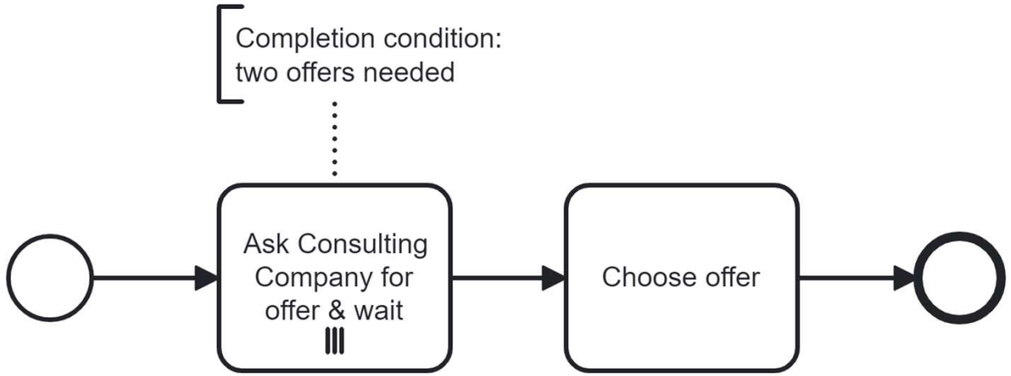
A Complex Situation | EB Subprocess



A Complex Situation | Signals



A Complex Situation | Multi-Instance



Criteria for choosing a Pattern

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1. Ease of Understanding
2. Readability
3. Target Group
4. Flexibility
5. Reusability
6. Existing Styleguide
7. Implementation Implications
8. Workflow Engine Characteristics
9. BPMN semantics

How to Pattern...

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Identification

Figure out which kinds of problems you encounter a lot

Research

Check resources for existing patterns

Consistency

Apply patterns in a consistent fashion

Discussion

Talk about use cases and potential BPMN representations

Iteration

Iterate & refactor your process models to improve them

Thank You

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