Rutger van Dijk

Our BPMN guidelines

How to model your BPMN diagrams so everybody understands them, and they are easy to maintain.

There are infinite ways to model your BPMN diagrams, these are the guidelines we use within MyCubes and they are based upon our own best practices.

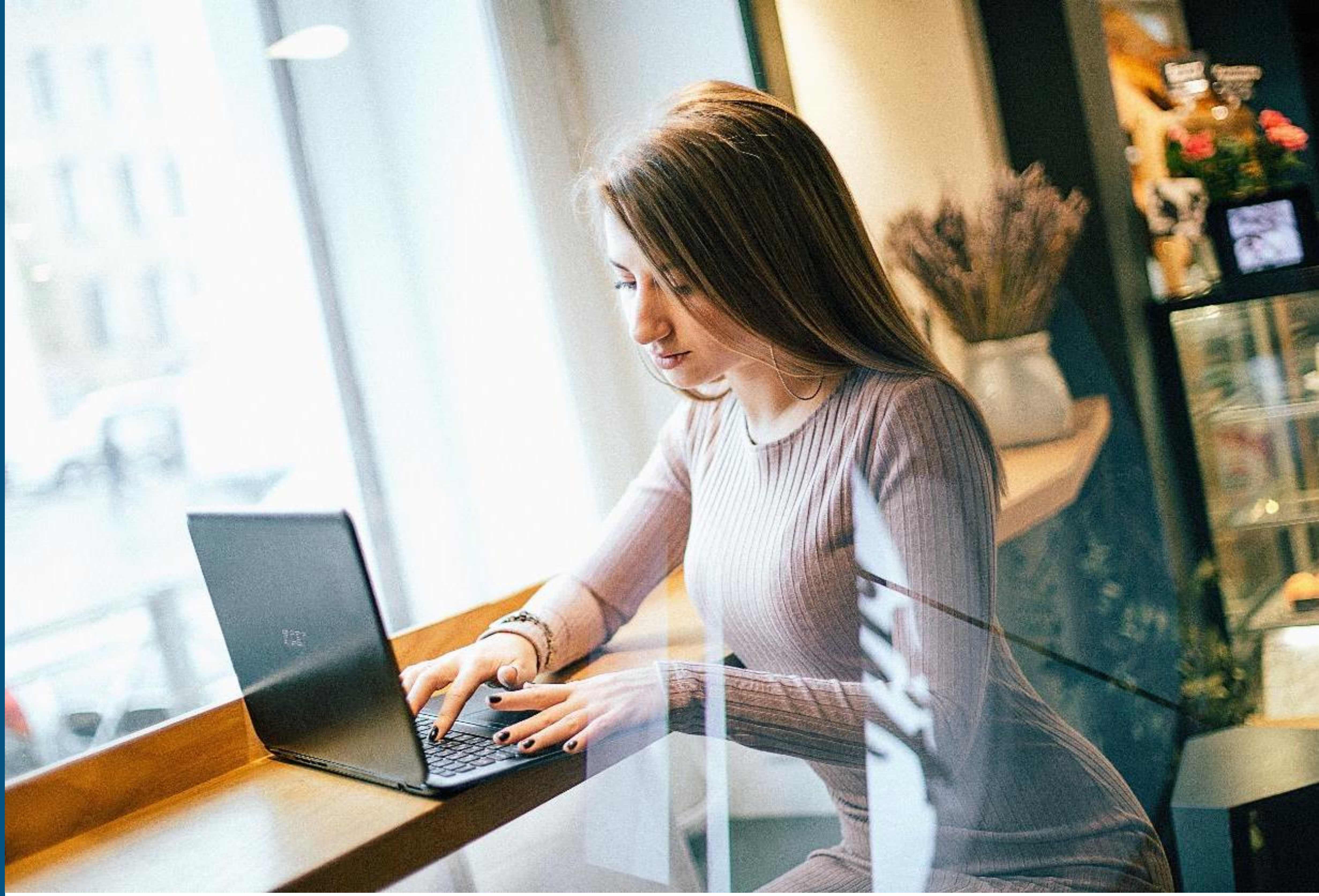
Feel free to contact me in case you don't agree or have additional guidelines.

in rjvdijk ✉ rdijk@mycubes.nl

Guidelines

Model your processes smarter to avoid problems and improve collaboration

Agree to guidelines before you start modelling will save you a lot of headaches in the future



- ✓ Diagrams are clear to understand by all business and technical users.
- ✓ The solution can be supported in production.
- ✓ Any dashboard/report will show correct and understandable data.

Guideline categories

01 Flow

Flow guidelines help you model complex business processes and keeping it visually clear.

02 Notation

Notation guidelines help you to clarify by labels what happens at every step of the process.

03 Modeling

Modeling guidelines help to make diagrams consistent and avoid any problems in your application.

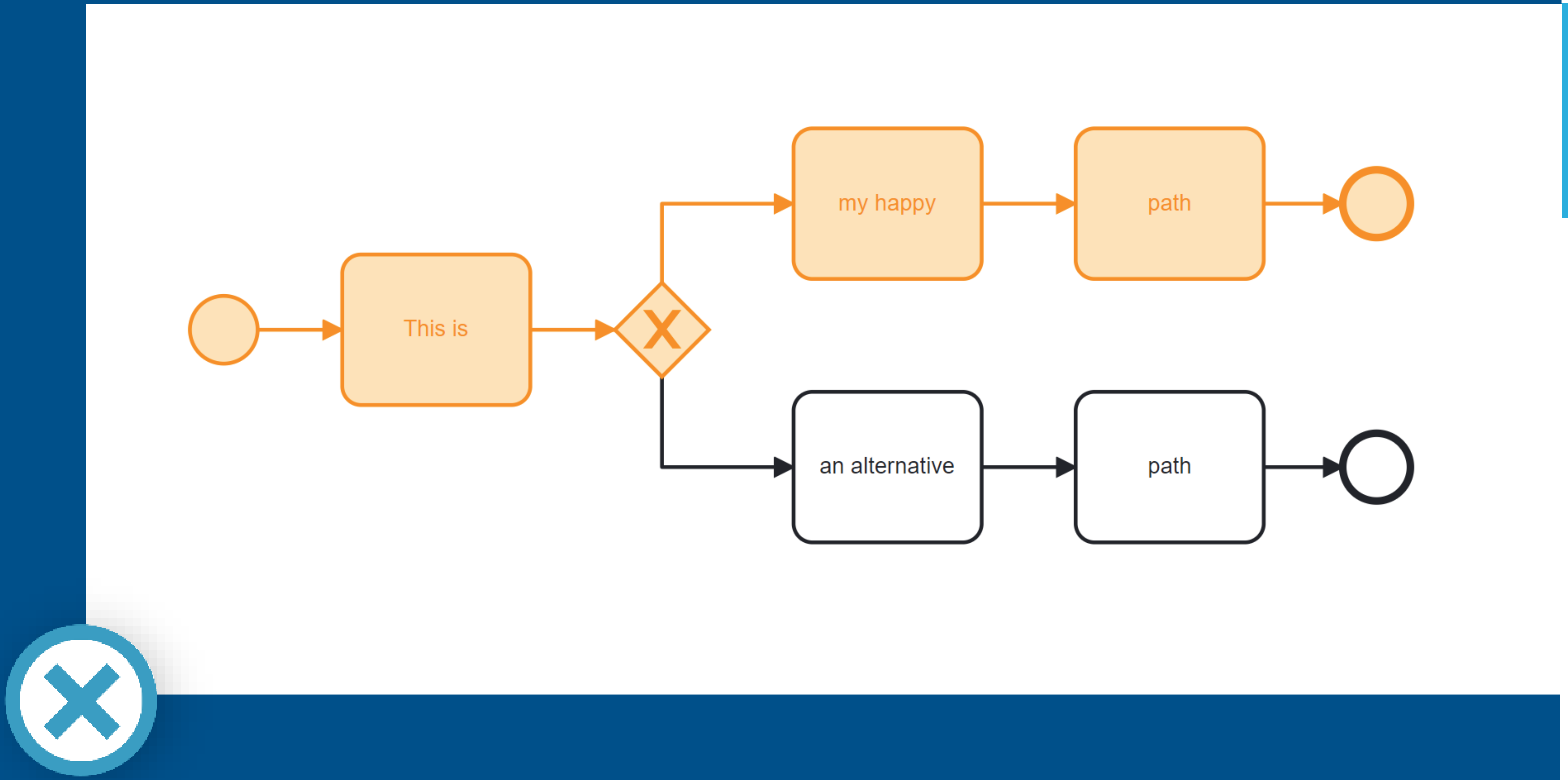
04 Miscellaneous

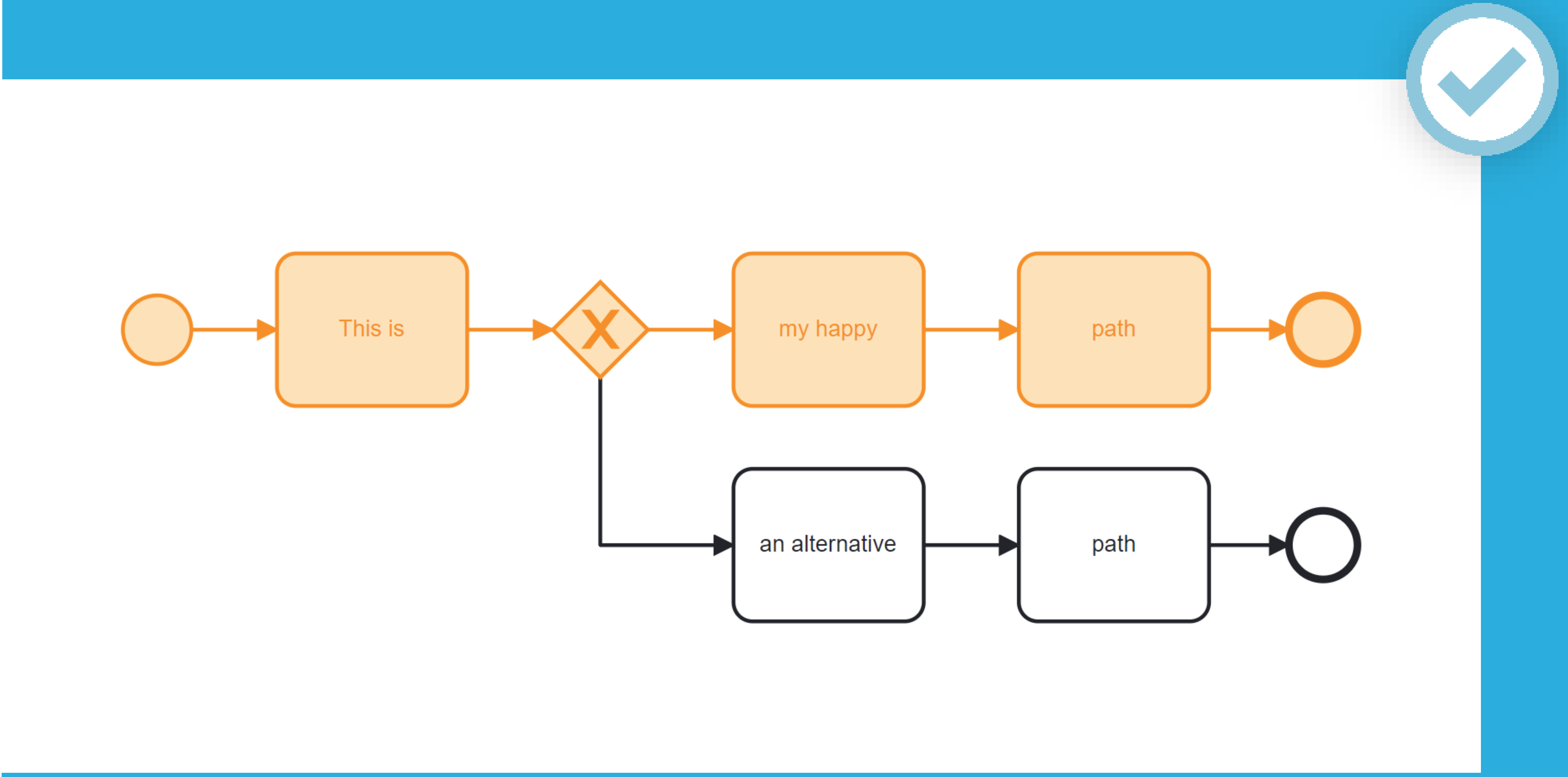
Some modelling patterns we try to use as much as possible and some we try to avoid.

1.1 Horizontal happy path

Note 1:

Always start with the main goal of the (sub)process and define the happy path.



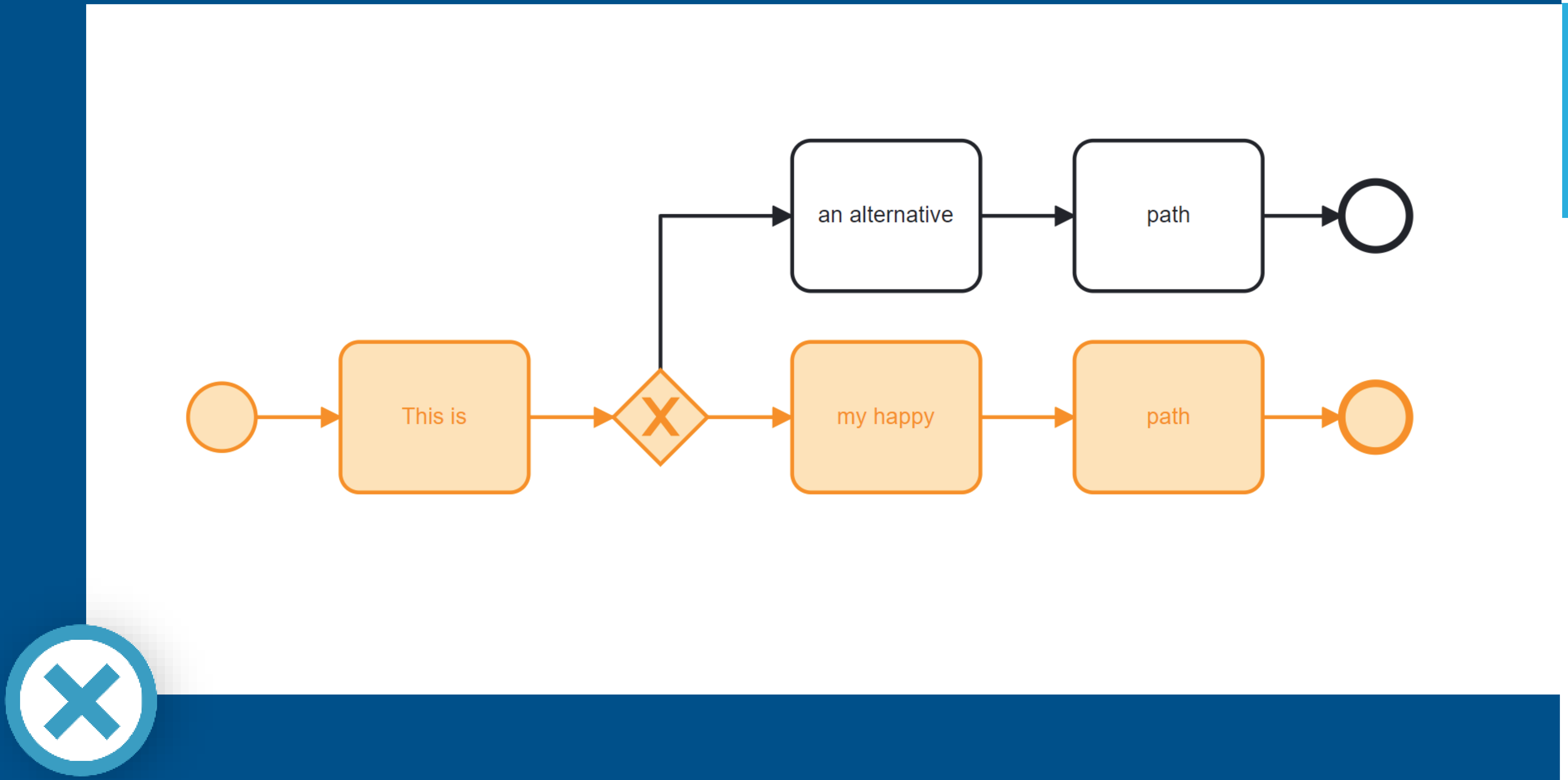


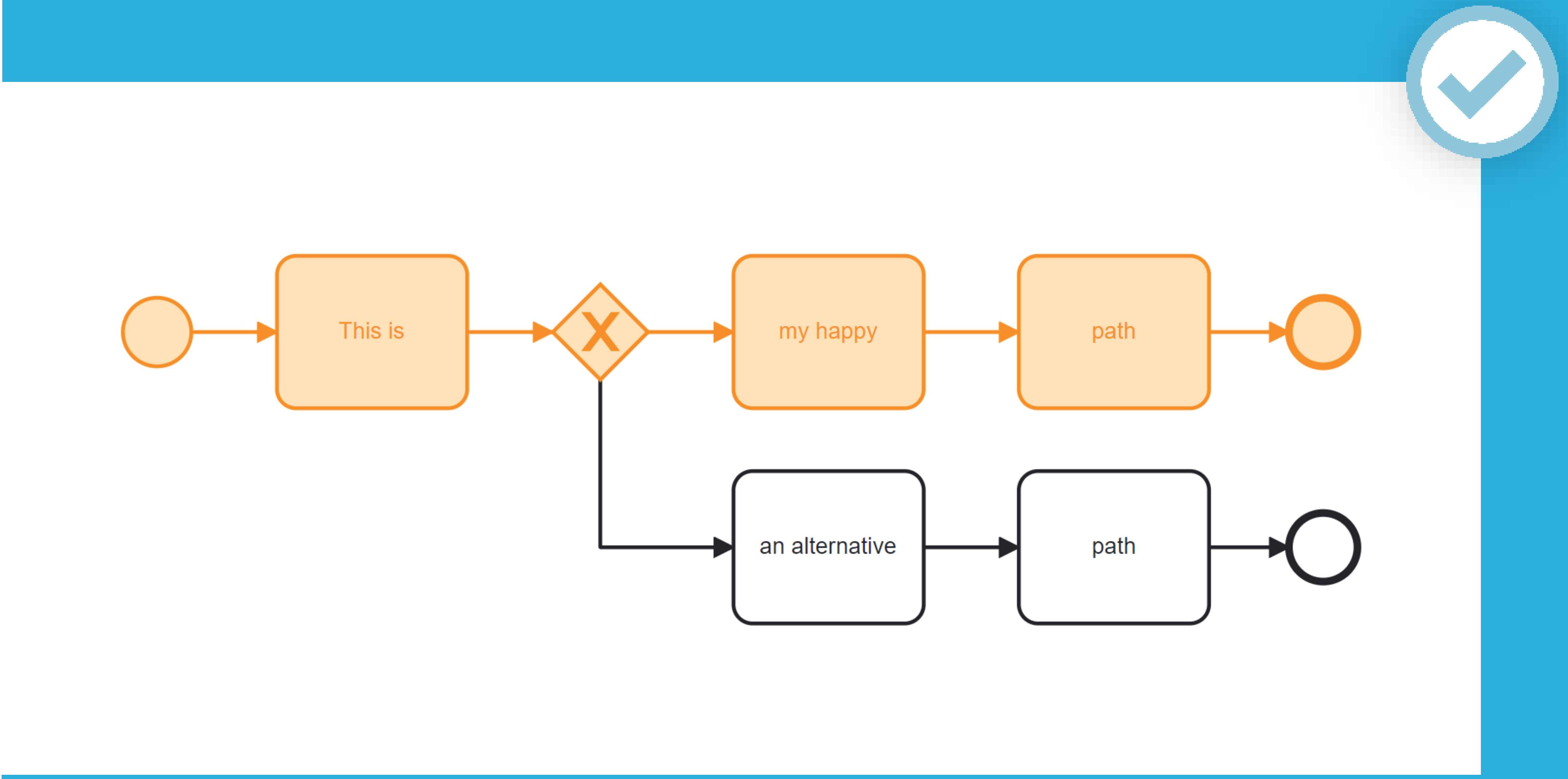
Note 2:

Model your happy path as one horizontal line. Any deviations from it will be super clear.

1.2 Model downwards

Note 1:
When you have an alternative path, you should always try to model downwards.



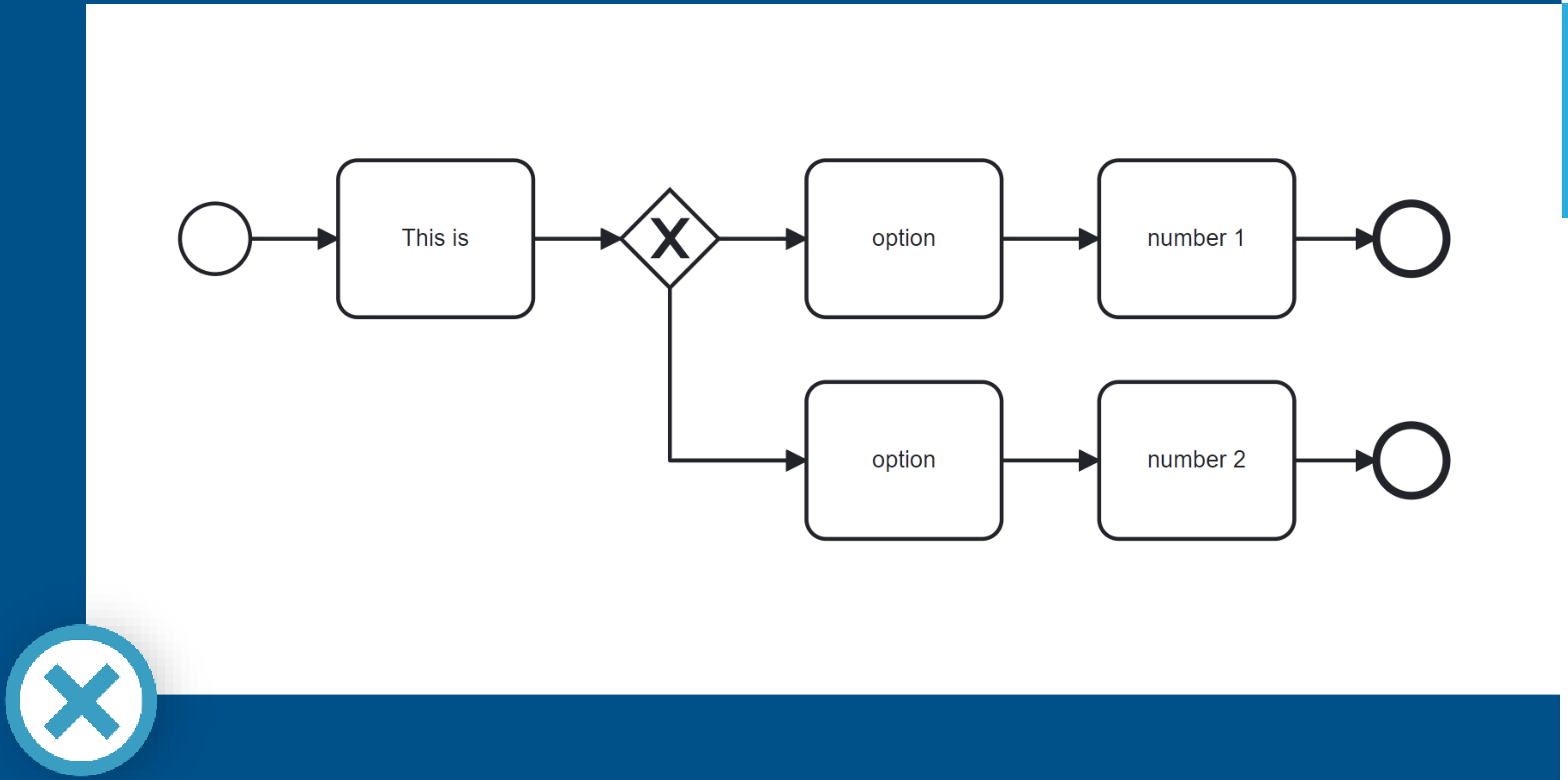


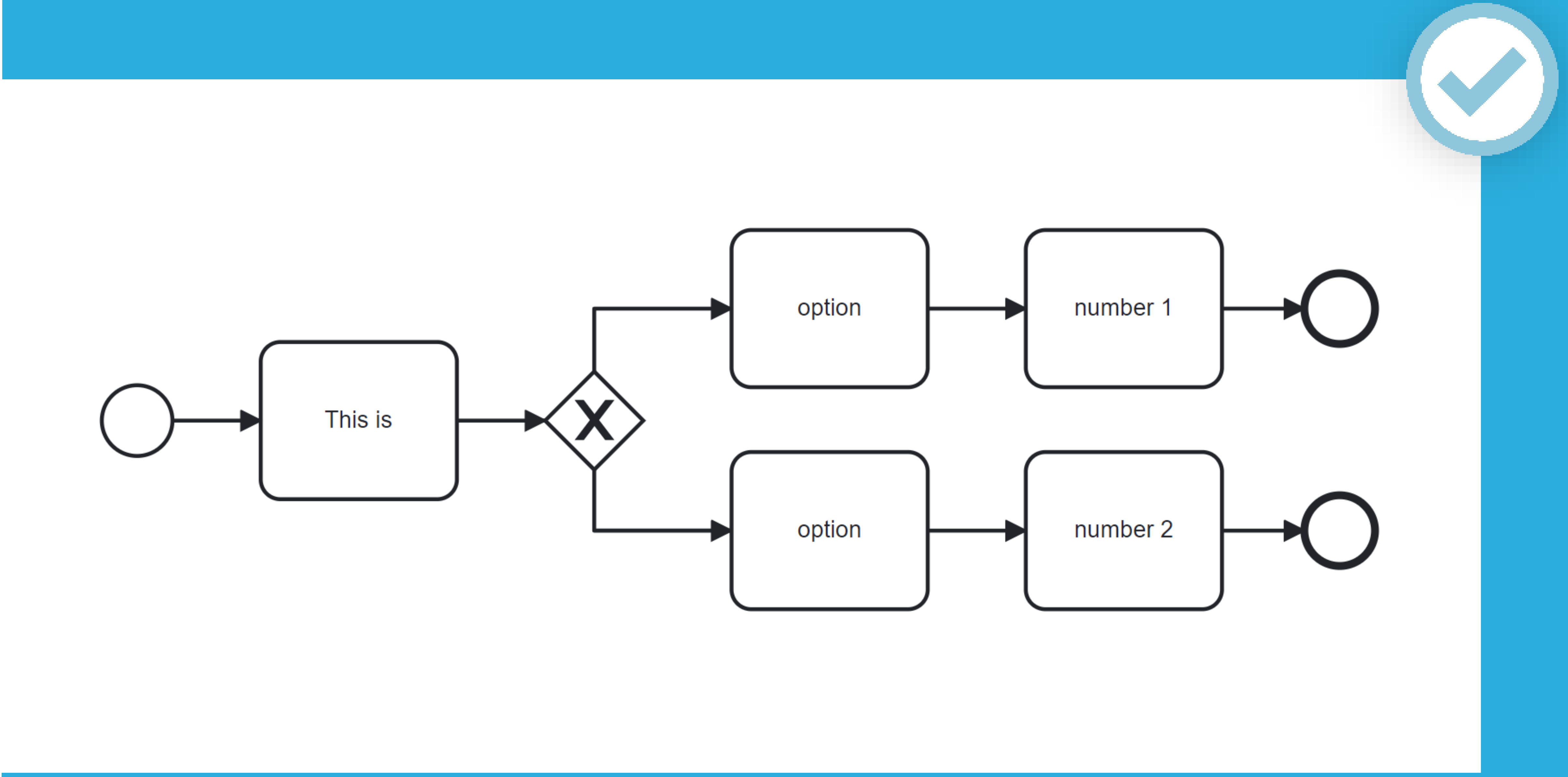
Note 2:
Don’t be too hard on yourself. If you have a good reason to go up, just do it.

1.3 Equal options

Note 1:

If there is not one happy flow but multiple equal options.





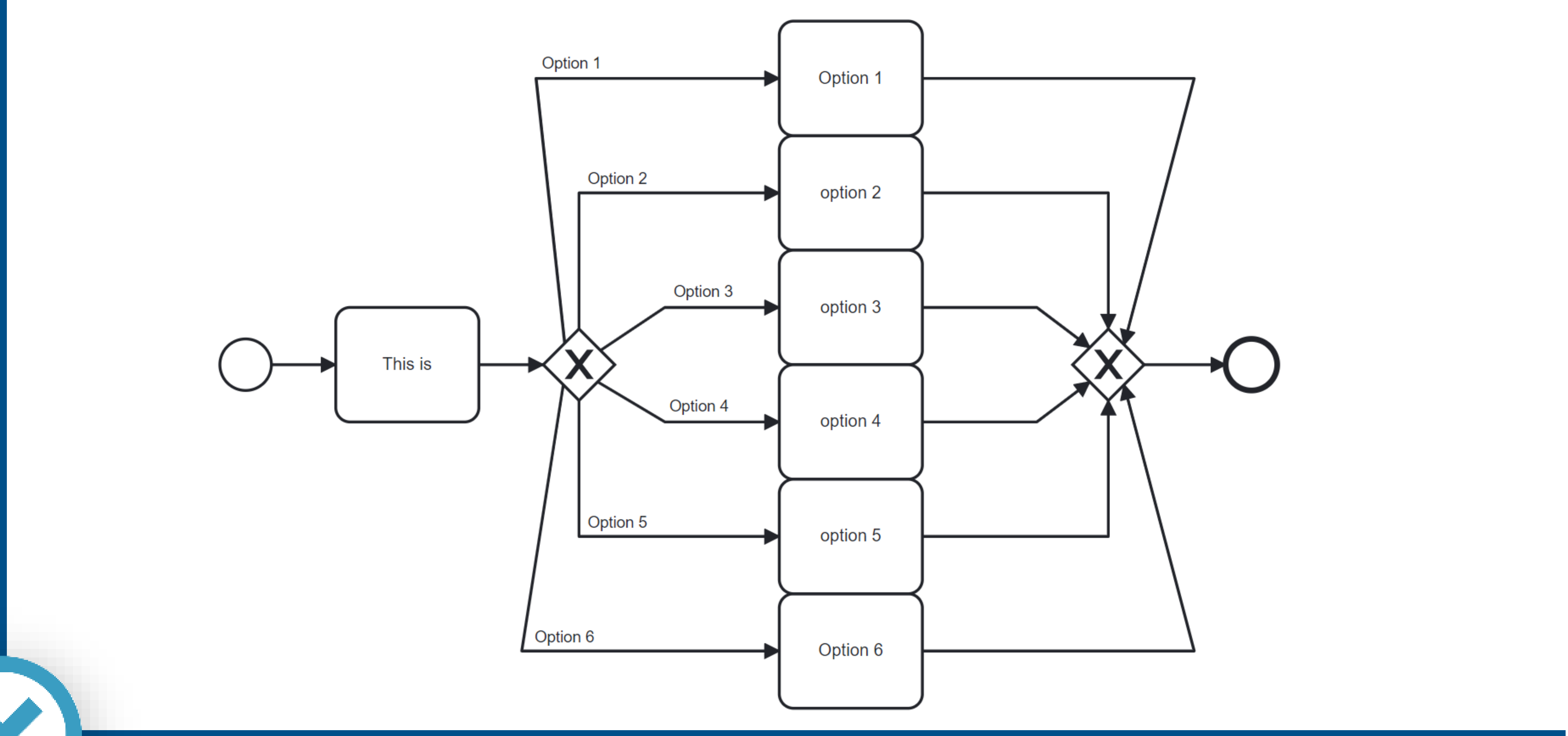
Note 2:

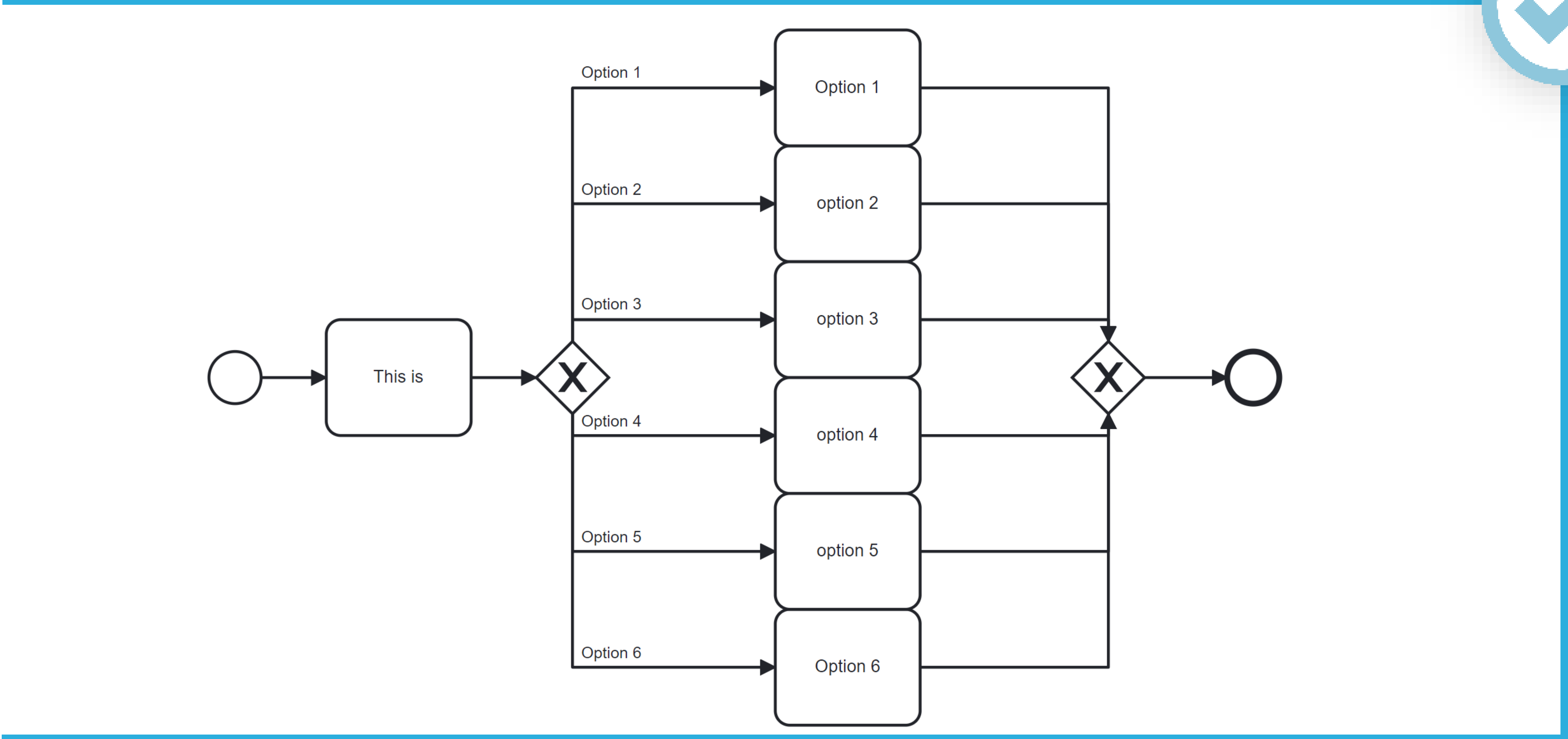
Model them so there is no happy flow, but two or more equal alternatives.

1.4 Multiple options

Note 1:

If there are a lot of options, merge arrows in the same direction for clarity.



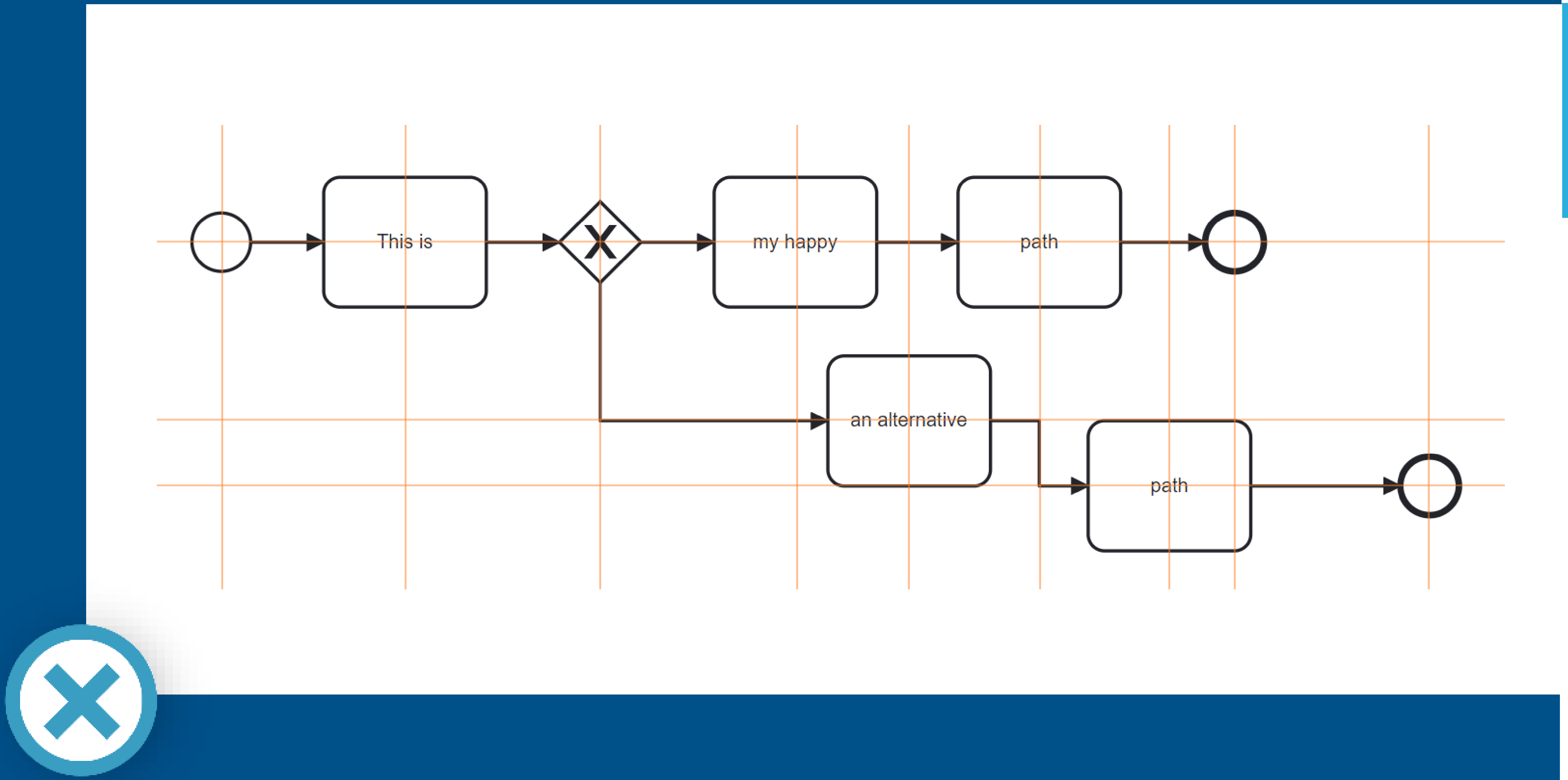


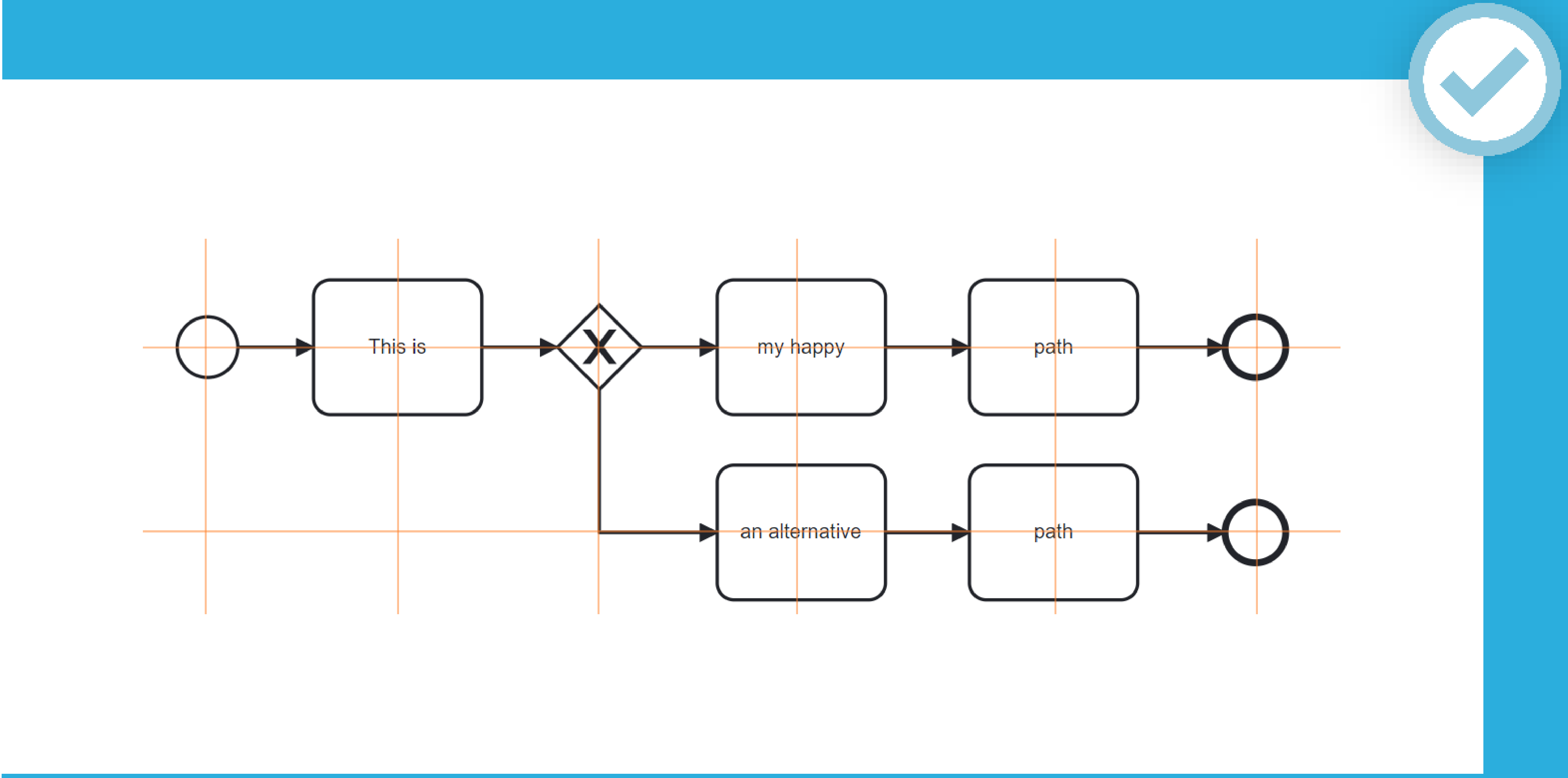
Note 2:

You should always try to avoid overlapping elements. This is the only case where I suggest to do it.

1.5 Align elements

Note 1:
Align elements horizontally and vertically. Try to use as little different grid lines as possible.





Note 2:
Different element types should also be aligned even though their sizes differ.

Guideline categories

01

Flow

Flow guidelines help you model complex business processes and keeping it visually clear.

02

Notation

Notation guidelines help you to clarify by labels what happens at every step of the process.

03

Modeling

Modeling guidelines help to make diagrams consistent and avoid any problems in your application.

04

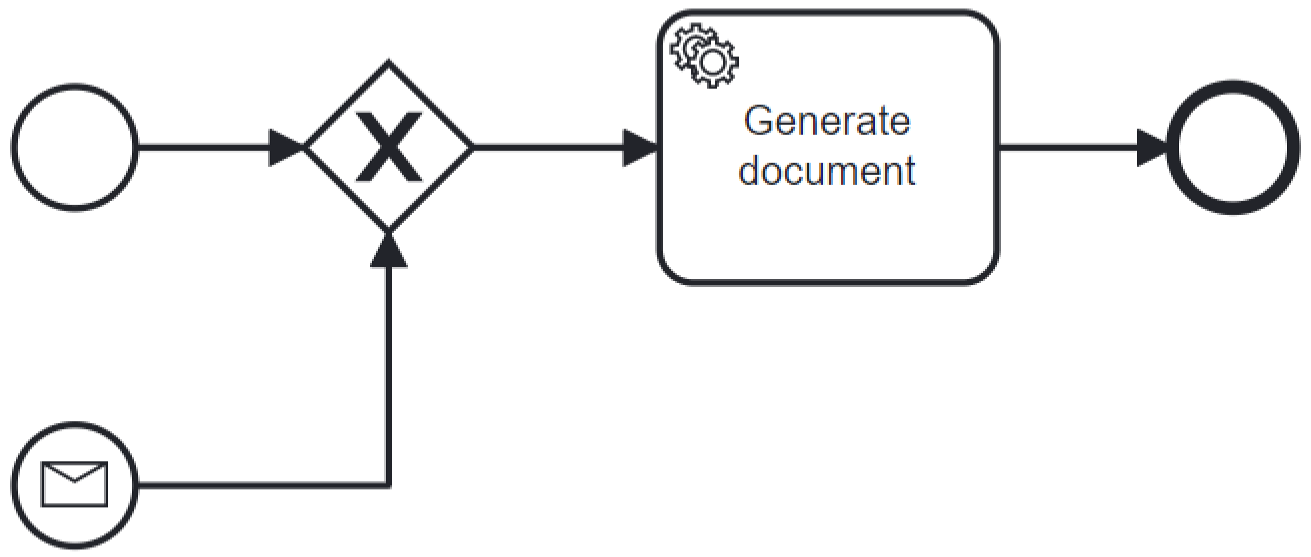
Miscellaneous

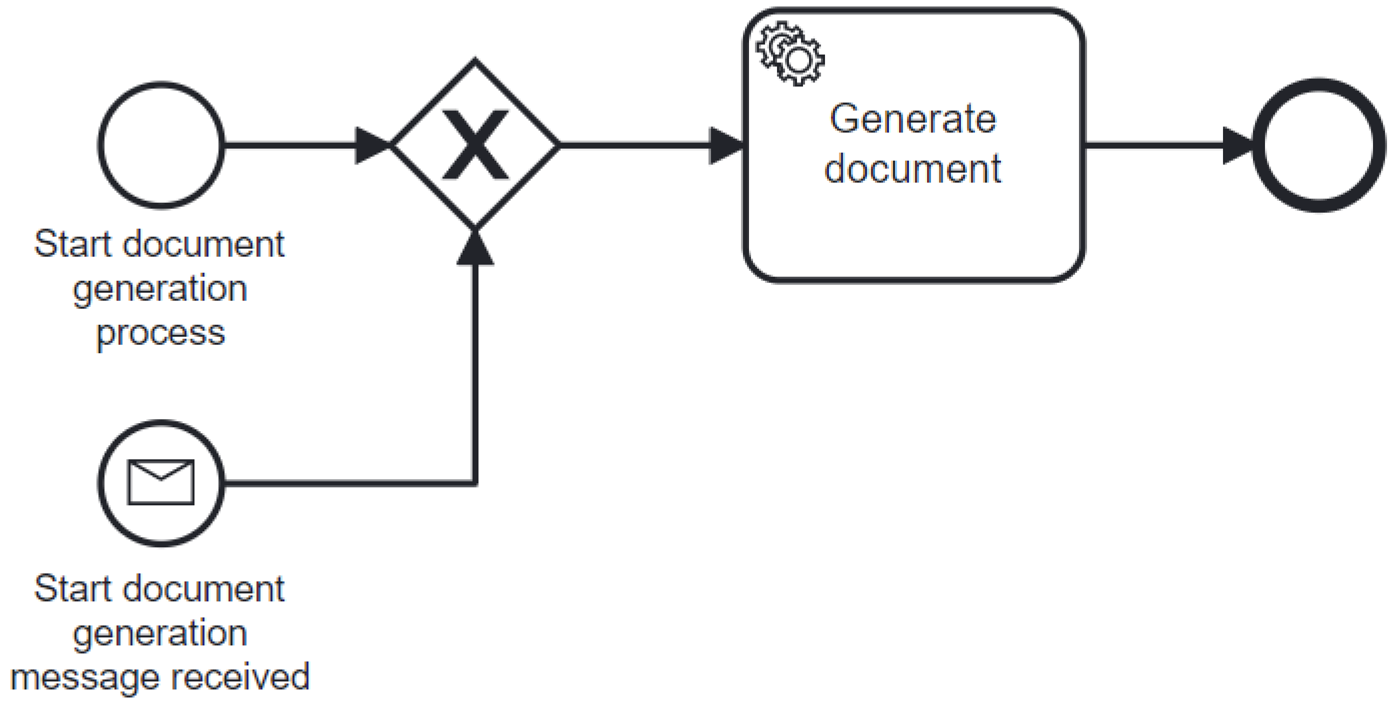
Some modelling patterns we try to use as much as possible and some we try to avoid.

2.1 Label all start events

Note 1:

The label of any Start event element should clearly indicate what is the expectation of the outcome of this (sub)process.



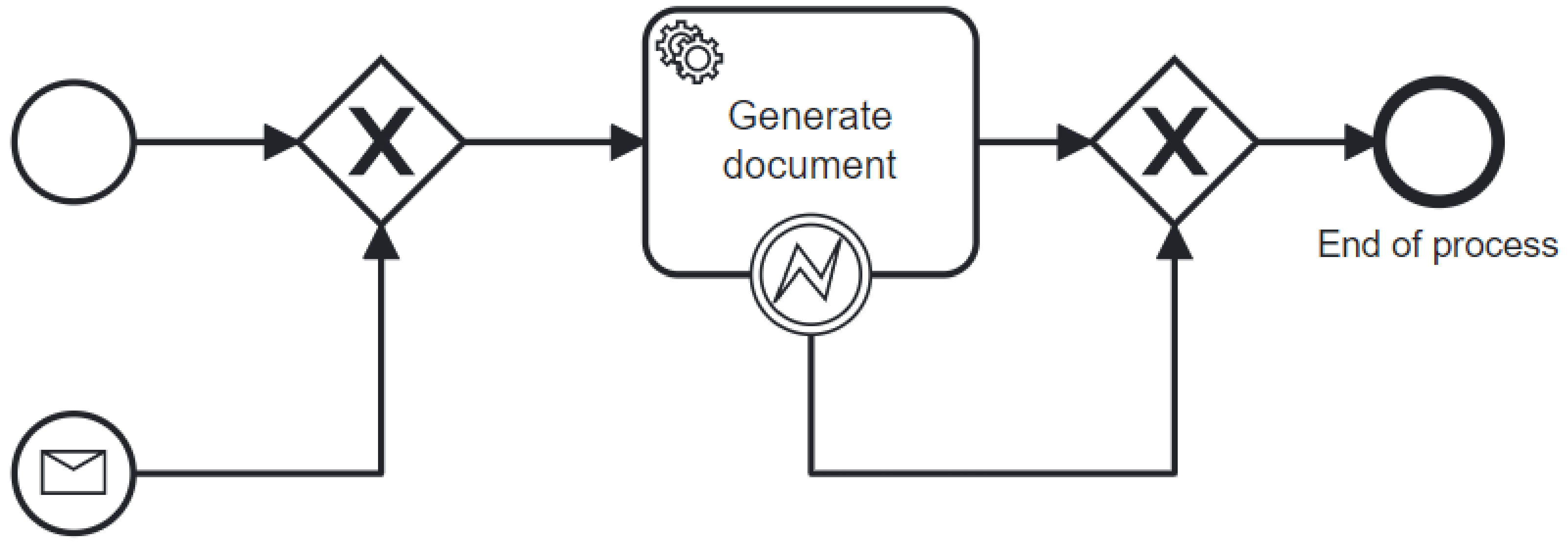

Start document generation process
Start document generation message received
Generate document

Note 2:

When the (sub)process is triggered via some special event, make sure the trigger is part of the label.

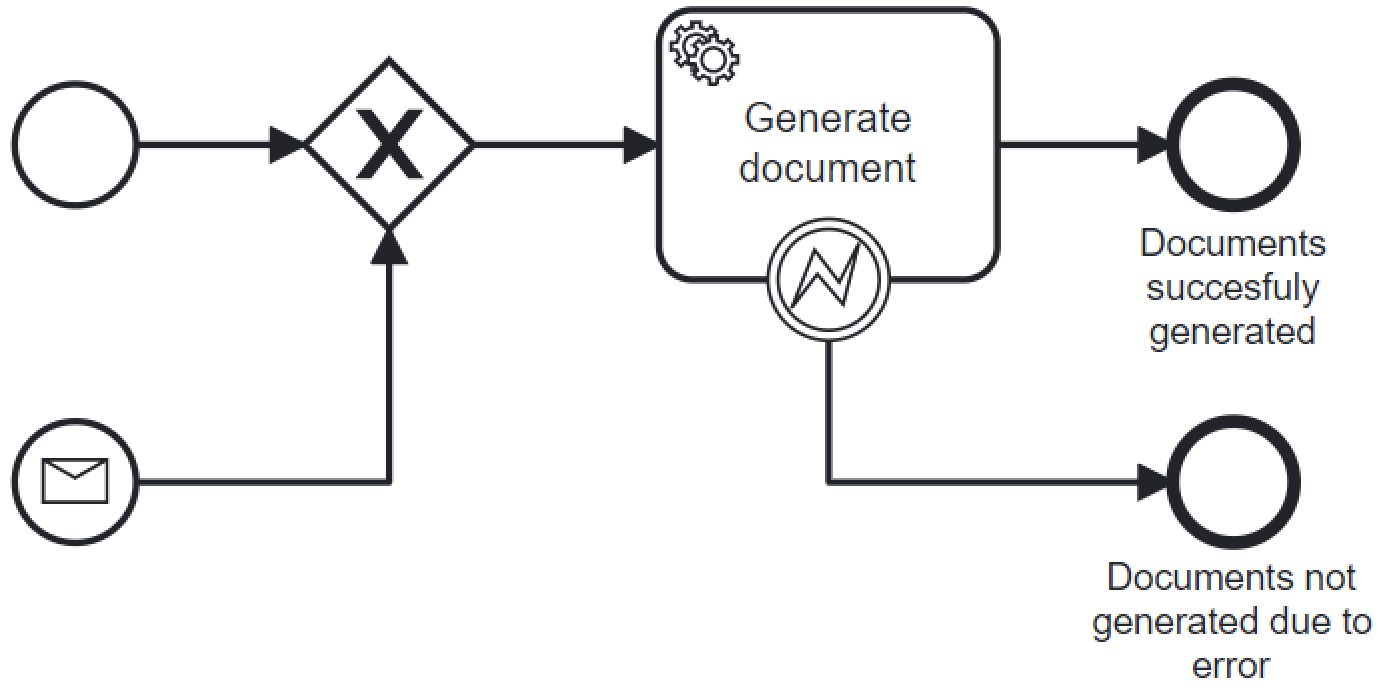
2.2 Label all end events

Note 1:
The label of any End event element should clearly indicate what is the exact outcome of a process instance in that end state.



✗

✓

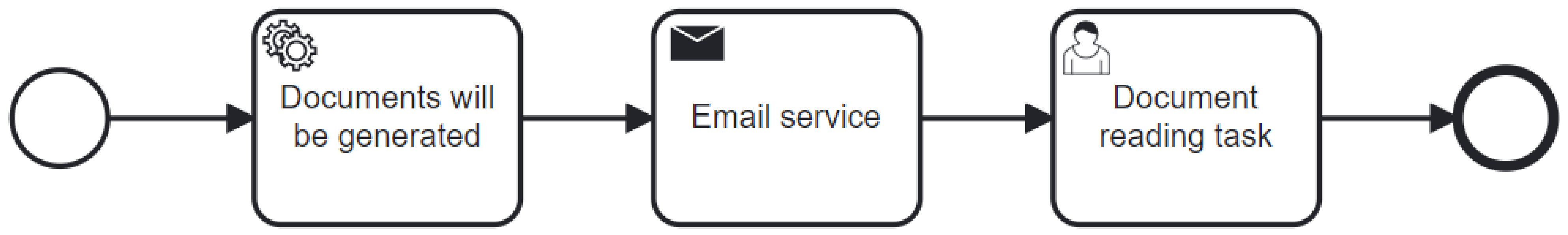


Generate document
Documents succesfuly generated
Documents not generated due to error

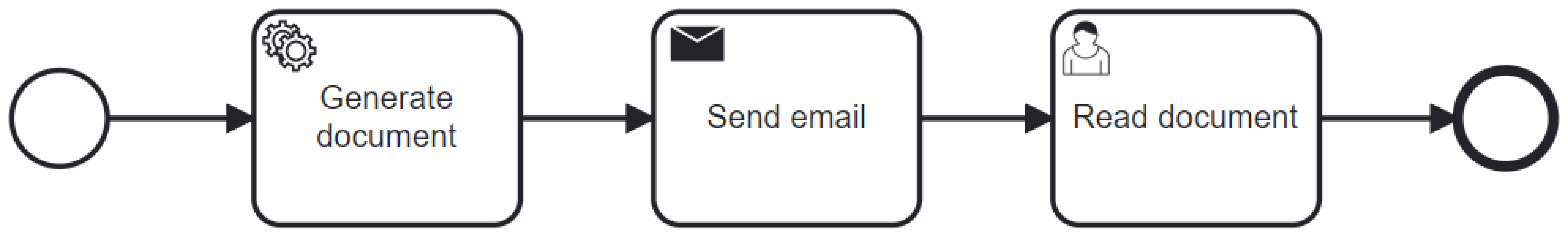
Note 2:
Different outcomes should always result in different end states.

2.3 Workflow task

Note 1:
The label of a Task element should be written in an active state.



✗

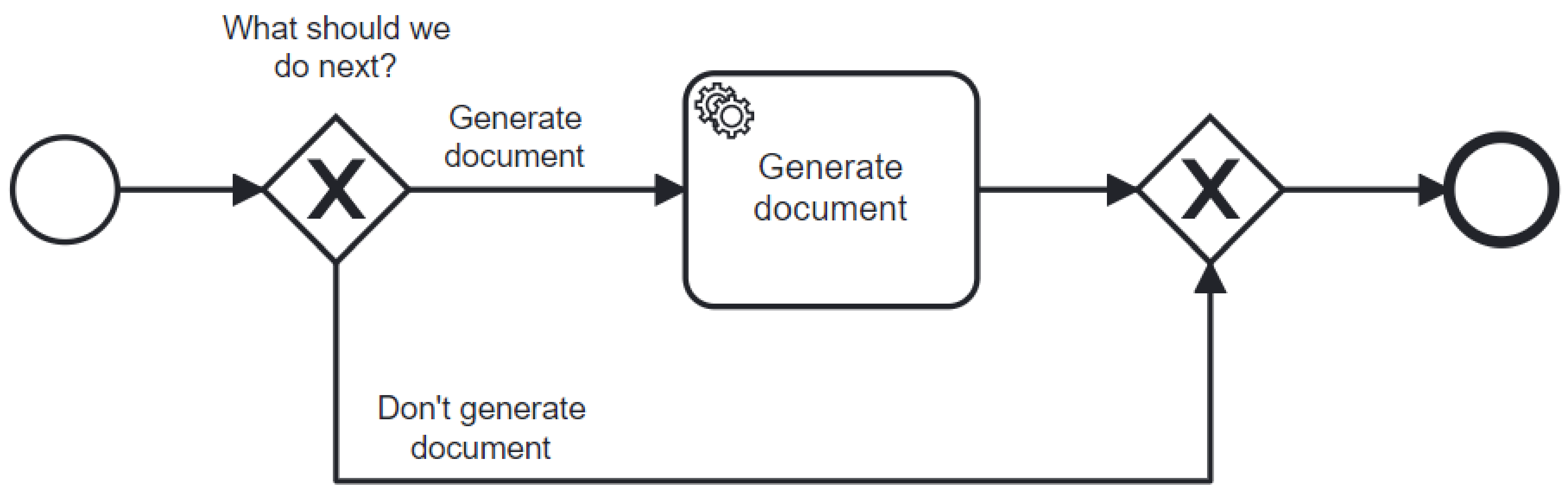


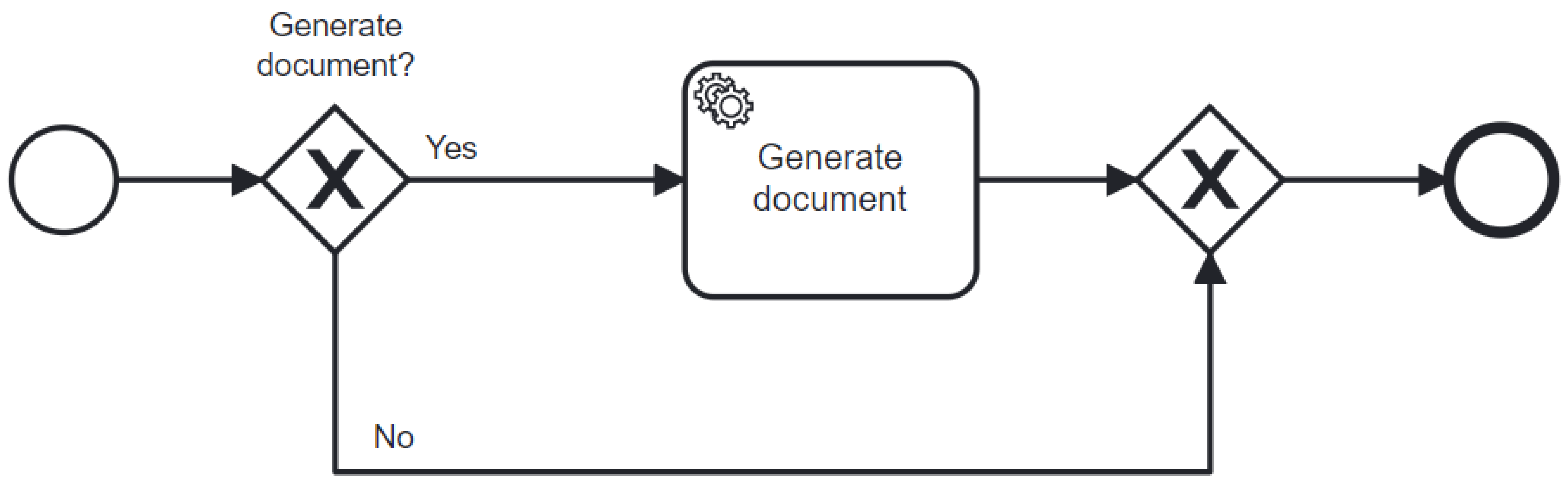
✓

Note 2:
Describe what activity is done within that specific task.

2.4 XOR gateway question

Note 1:
Specify a clear question that is as short as possible.

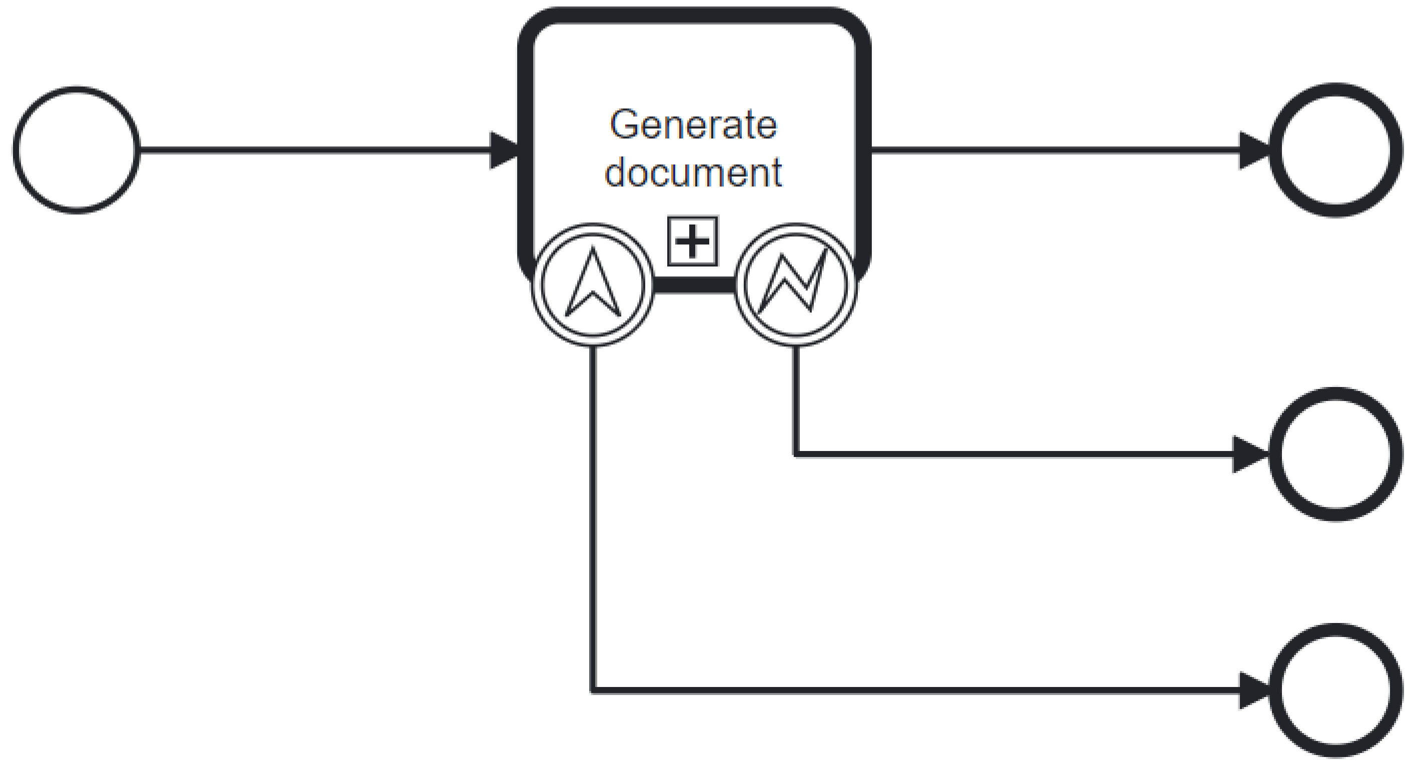


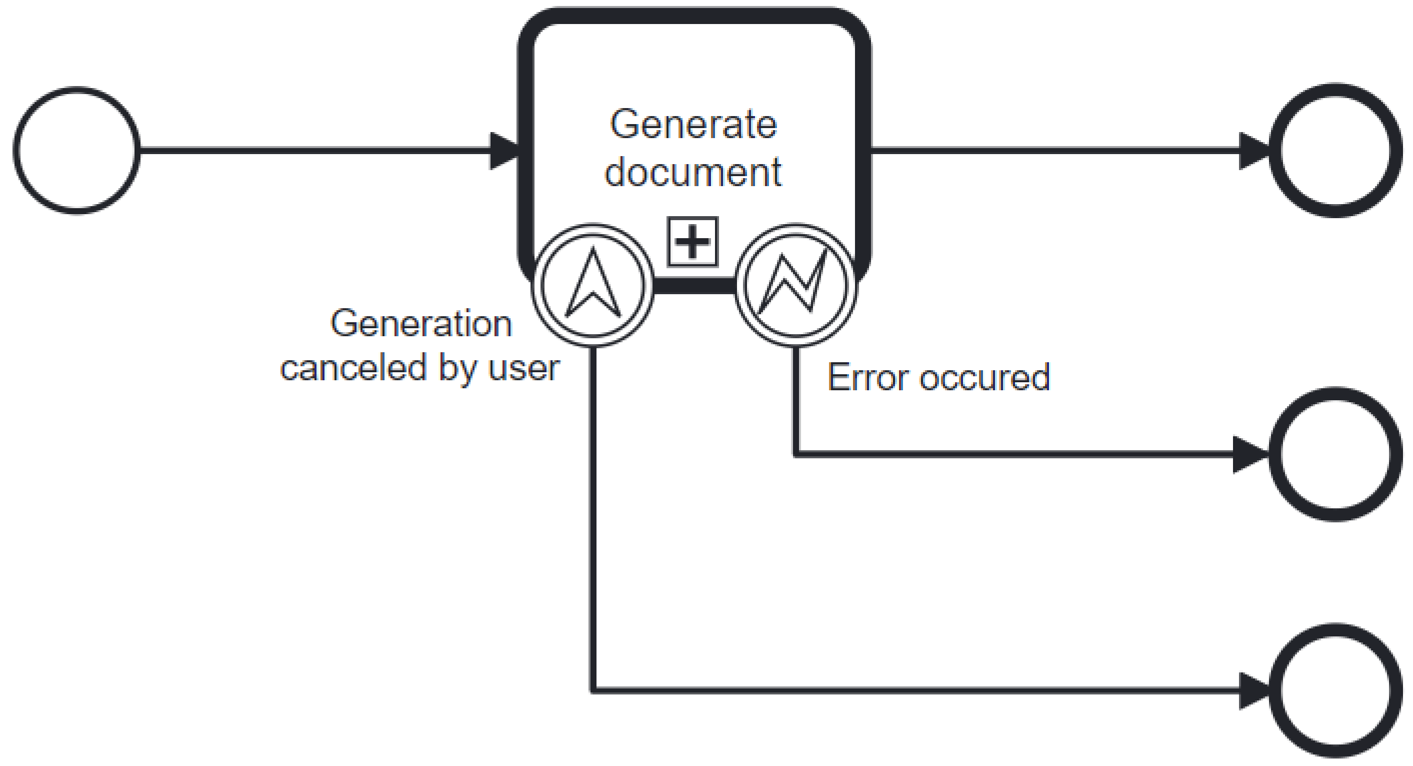


Note 2:
If possible, try to implement a yes/no question?

2.5 Boundary events

Note 1:
Label all boundary events so you know what triggered them.





Note 2:
This will save you a lot of time in production support and will improve your dashboarding/monitoring.

Guideline categories

01

Flow

Flow guidelines help you model complex business processes and keeping it visually clear.

02

Notation

Notation guidelines help you to clarify by labels what happens at every step of the process.

03

Modeling

Modeling guidelines help to make diagrams consistent and avoid any problems in your application.

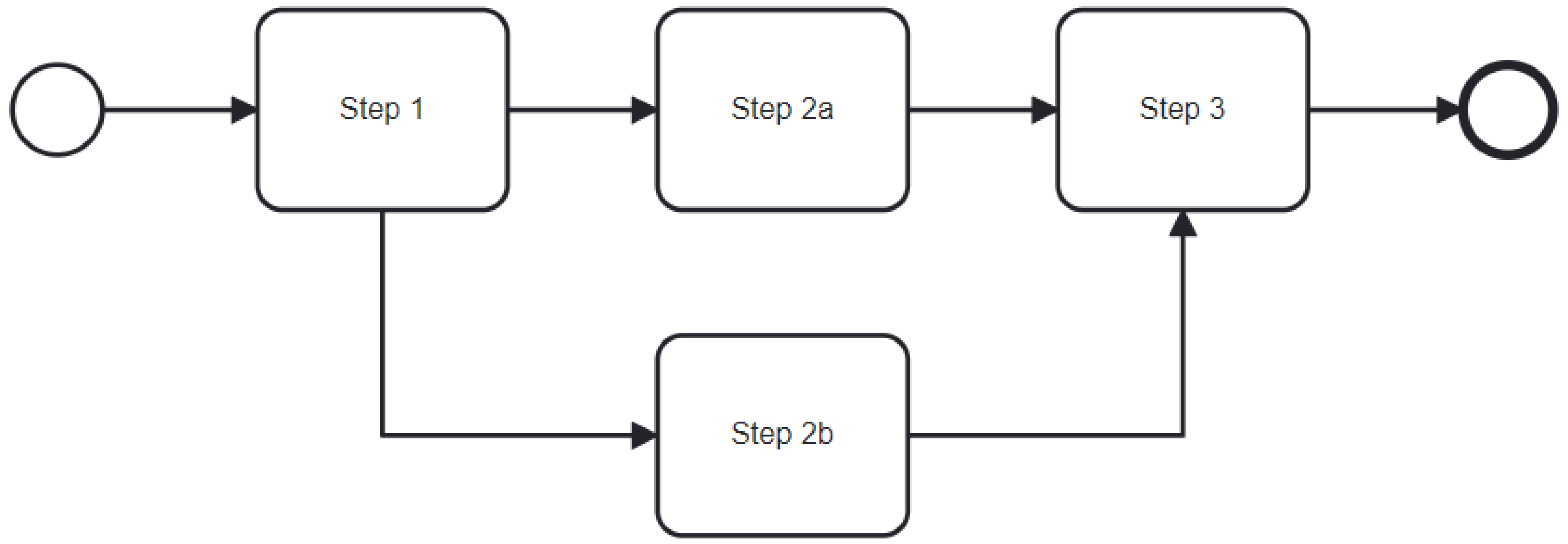
04

Miscellaneous

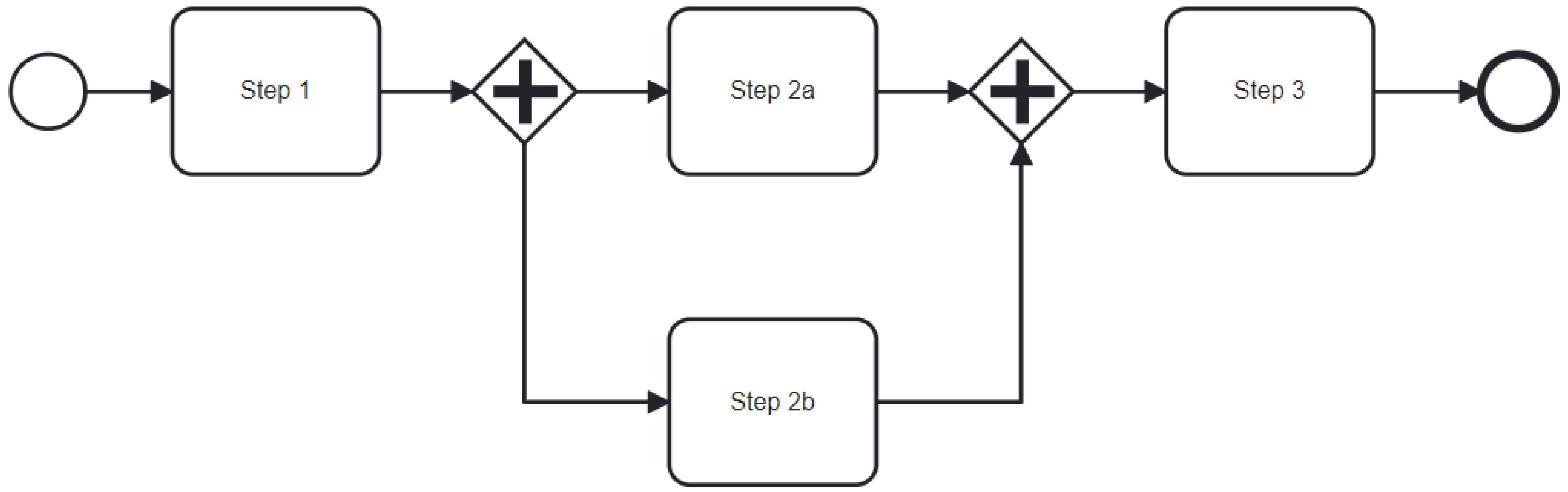
Some modelling patterns we try to use as much as possible and some we try to avoid.

3.1 Explicit modeling

Note 1:
Always make clear what is going on with the use of gateways. Never split or merge branches without them.



✗

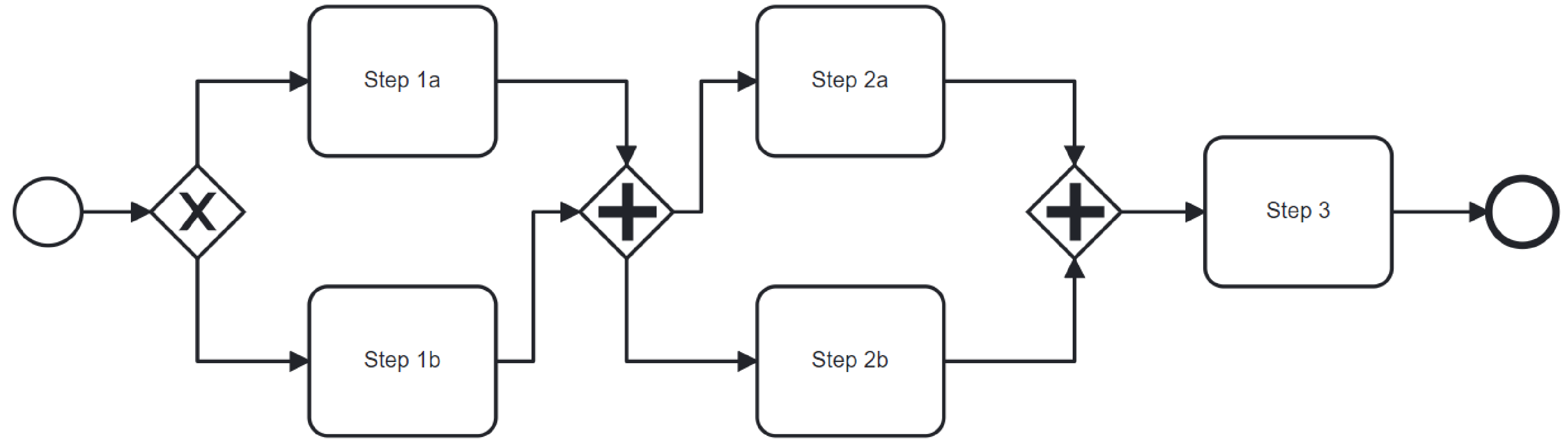


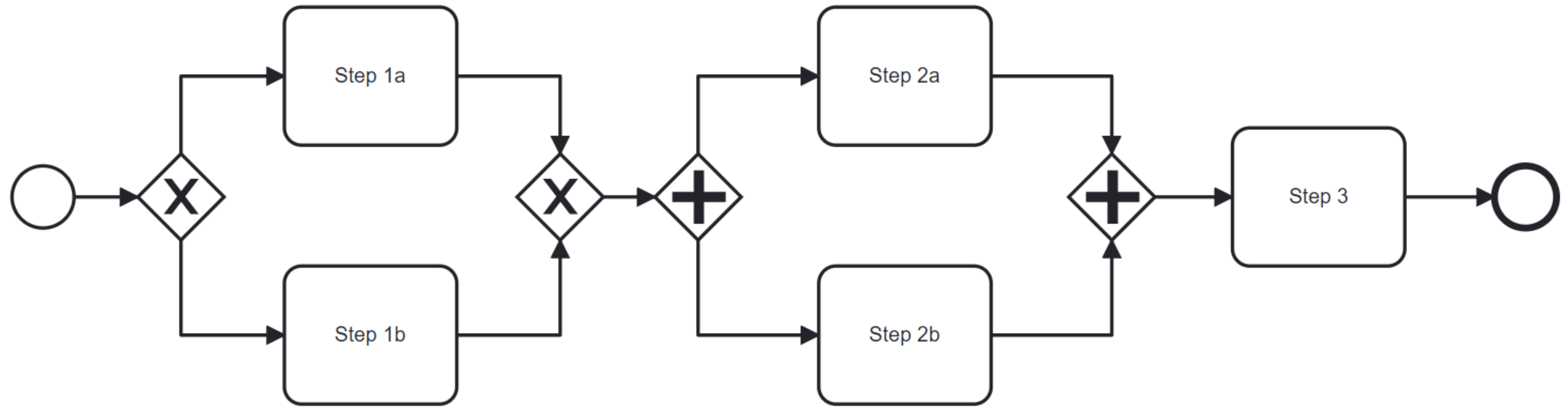
✓

Note 2:
These two examples are not even functionally the same. The diagram on the left could lead to unwanted duplicate process instances.

3.2 Use more XOR gateways

Note 1:
Always use separate gateways to merge and split branches.



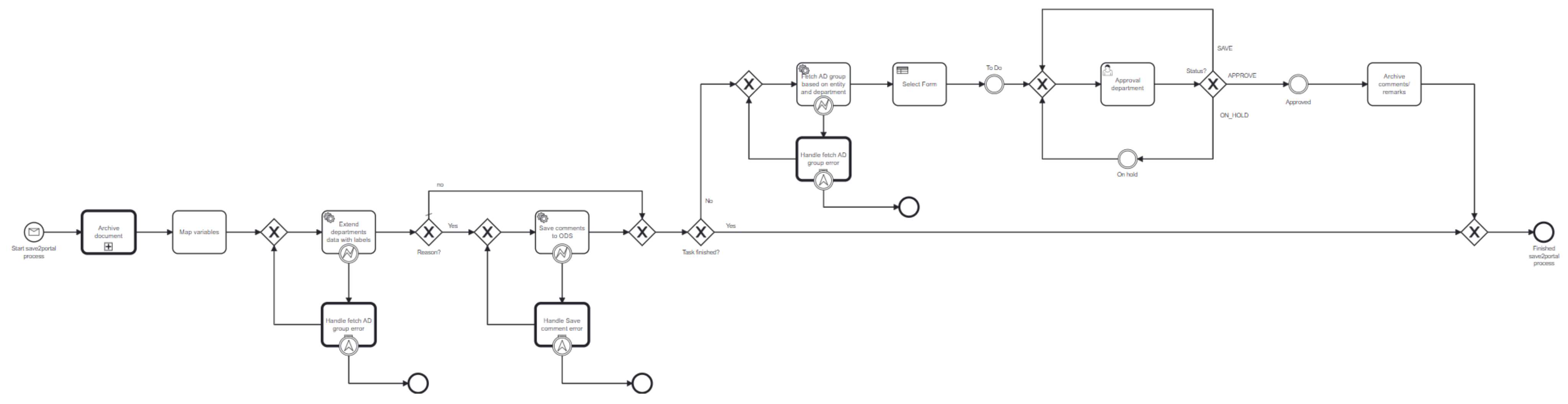


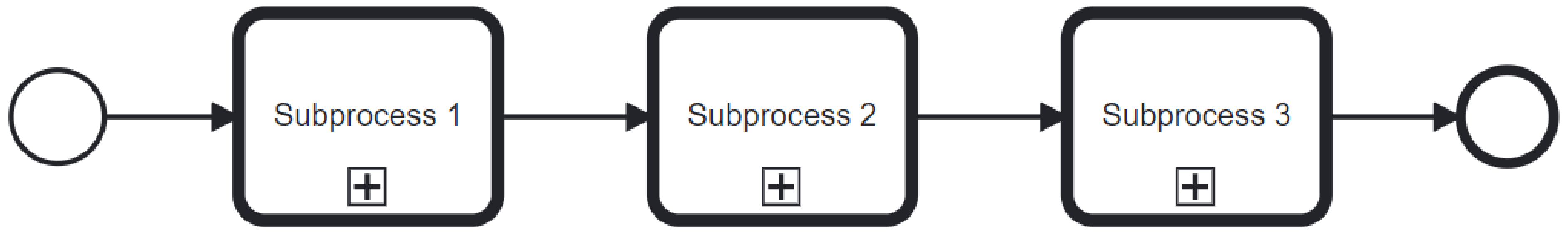
Note 2:
A gateway should have only one function.

3.3 Use subprocesses

Note 1:

When a (sub)process gets too complex to clearly present to a user, you need to refactor and start creating subprocesses.


Start save2portal process
Archive document
Map variables
Extend departments data with labels
Handle fetch AD group error
Reason?
Yes
no
Save comments to ODS
Handle Save comment error
Task finished?
No
Yes
Fetch AD group based on entity and department
Handle fetch AD group error
Select Form
To Do
Approval department
Status?
SAVE
APPROVE
ON_HOLD
On hold
Approved
Archive comments/ remarks
Finished save2portal process

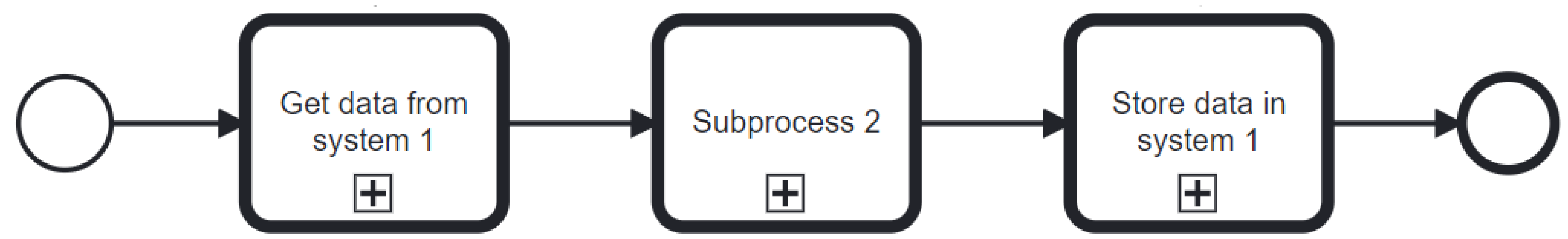


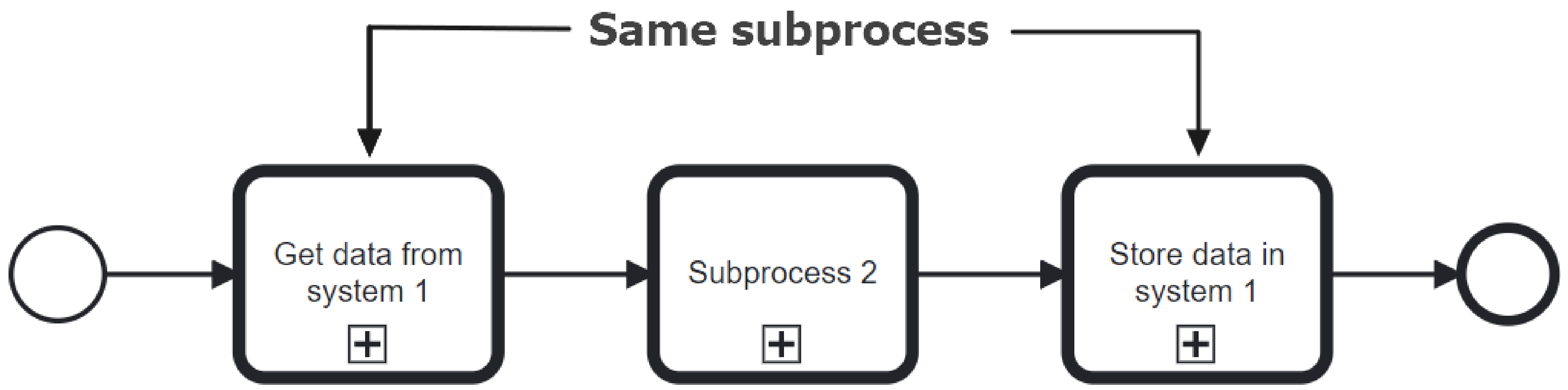
Note 2:

Try to think in subprocesses in an early stage, to avoid complex refactoring later.

3.4 Re-use subprocesses

Note 1:
When creating subprocesses think about re-usability.





Note 2:
For example, if you make multiple calls to the same external application. You can model a generic subprocess and re-use it.

CAMUNDA

MyCubes

Guideline categories

01

Flow

Flow guidelines help you model complex business processes and keeping it visually clear.

02

Notation

Notation guidelines help you to clarify by labels what happens at every step of the process.

03

Modeling

Modeling guidelines help to make diagrams consistent and avoid any problems in your application.

04

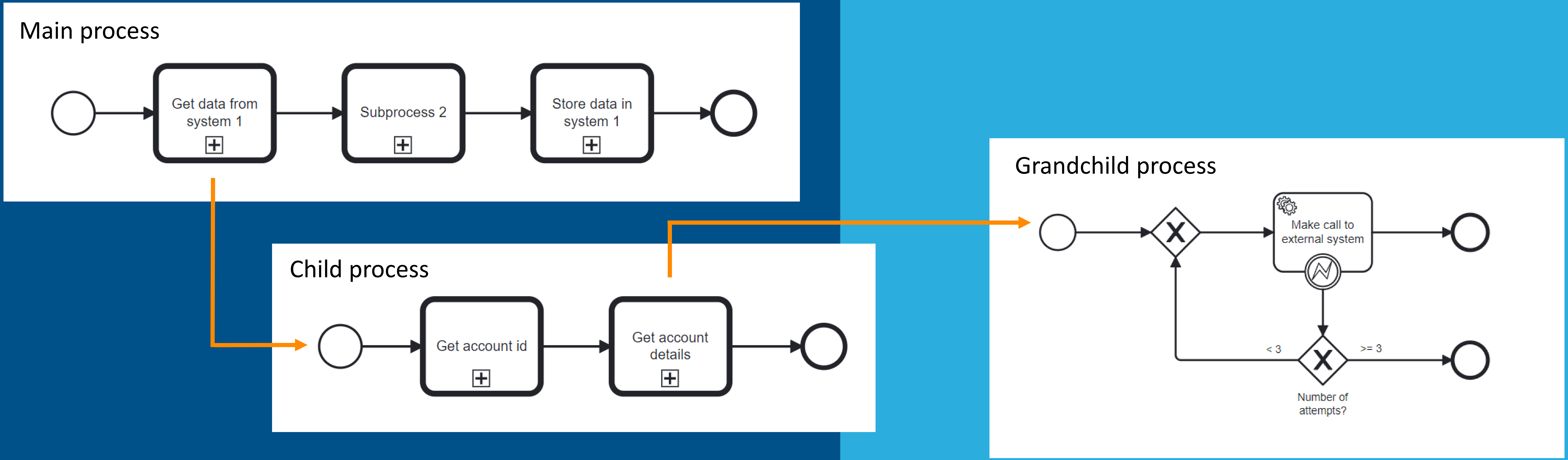
Miscellaneous

Some modelling patterns we try to use as much as possible and some we try to avoid.

4.1 Use level of diagrams

Note 1:

Model your highest-level diagram so it is clear to all users of the system, and it is an overview of the entire process.

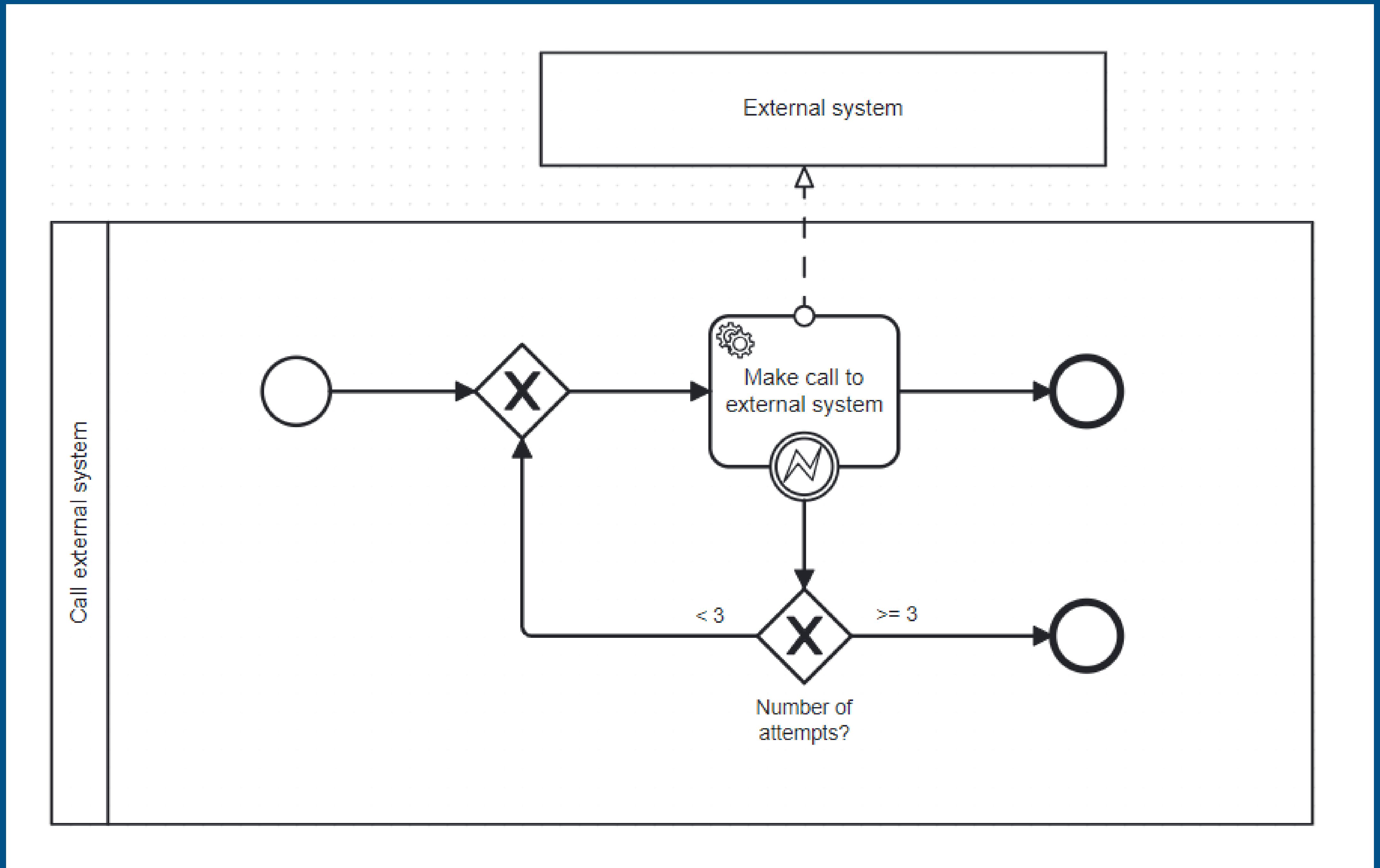


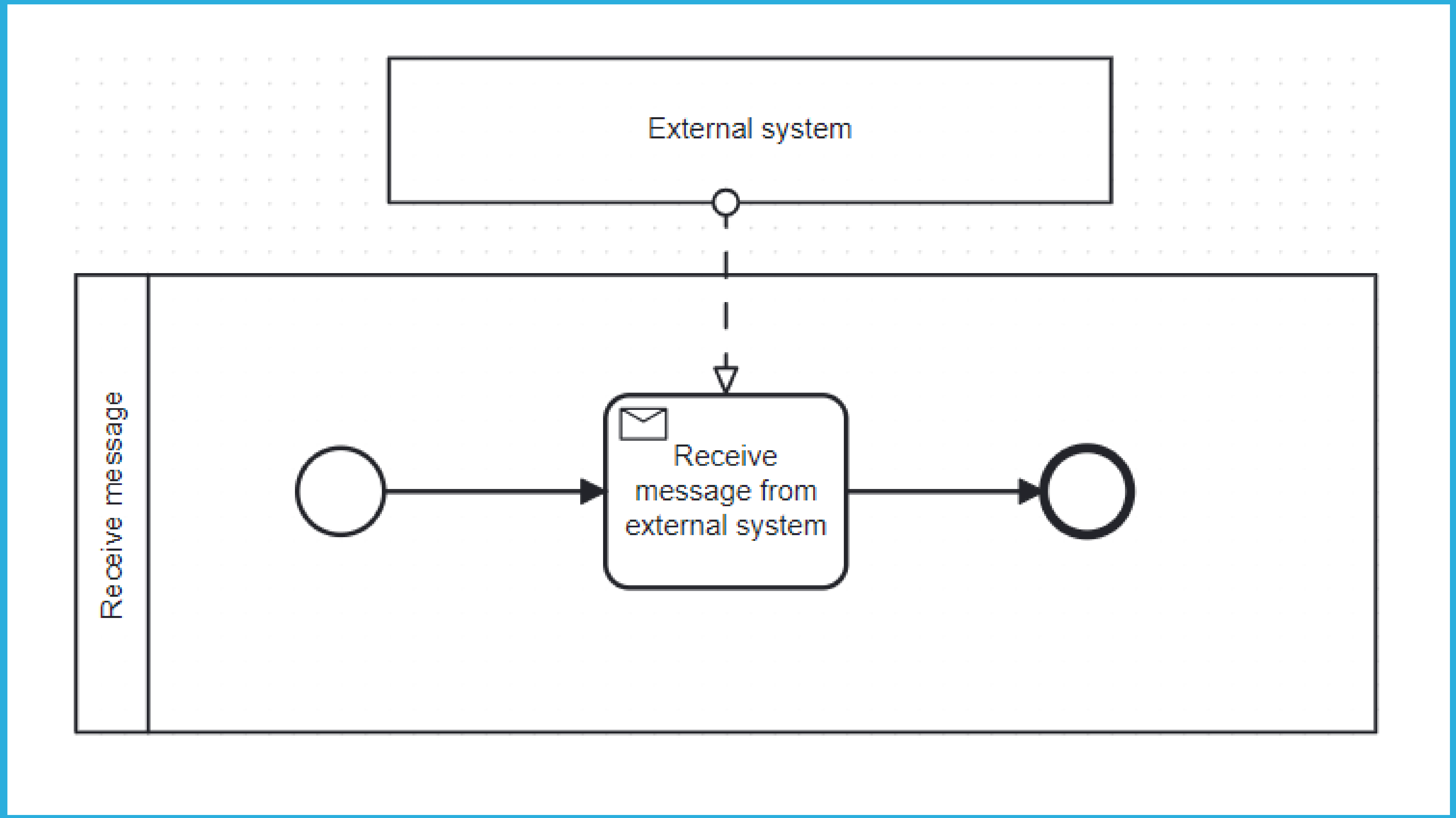
Note 2:

The deeper you go into the diagram levels; the more technical details can be used.

4.2 Use collapsed pools

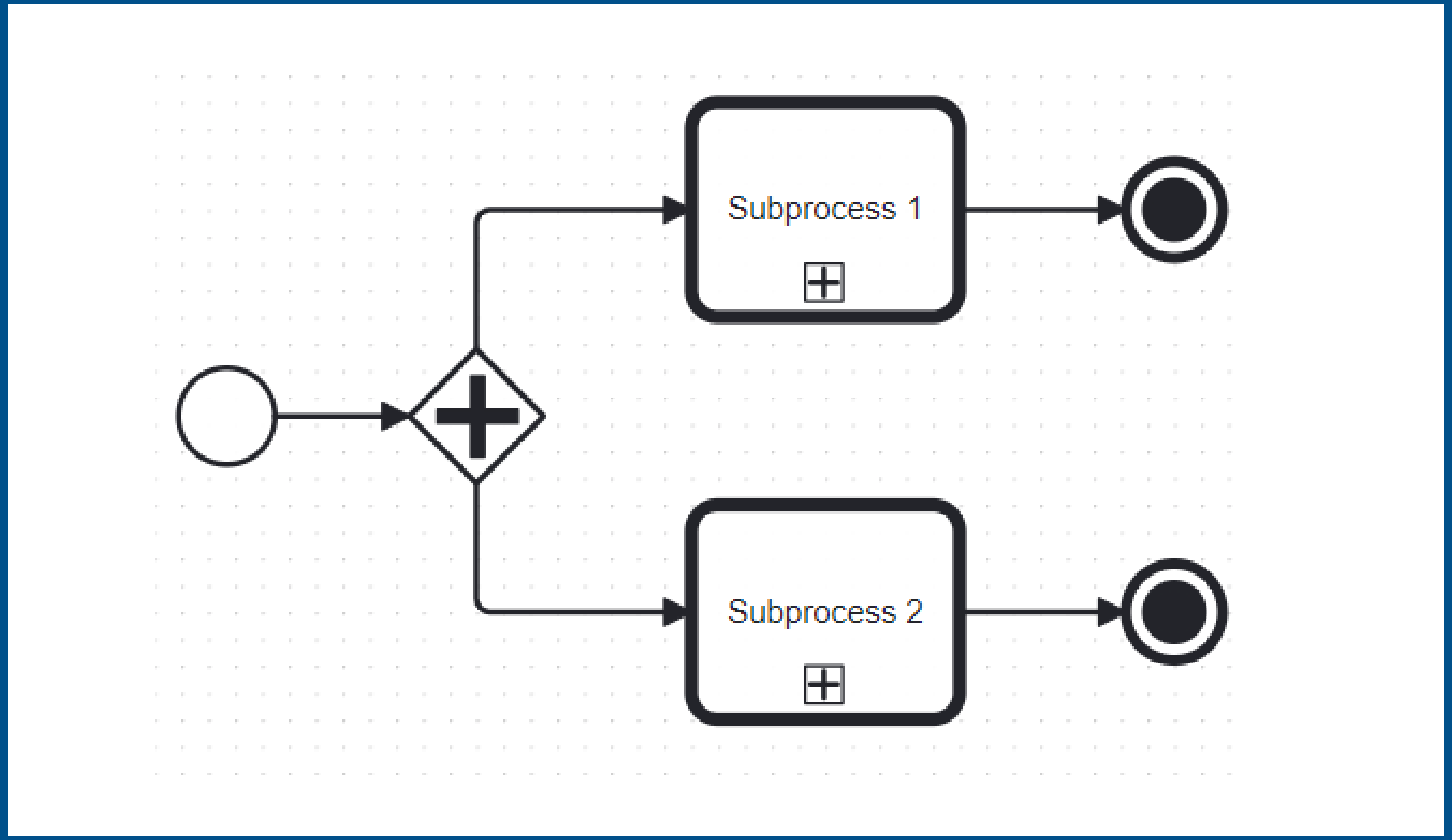
Note 1:
When we make a call to an external system, we want to make that clear in our diagrams.





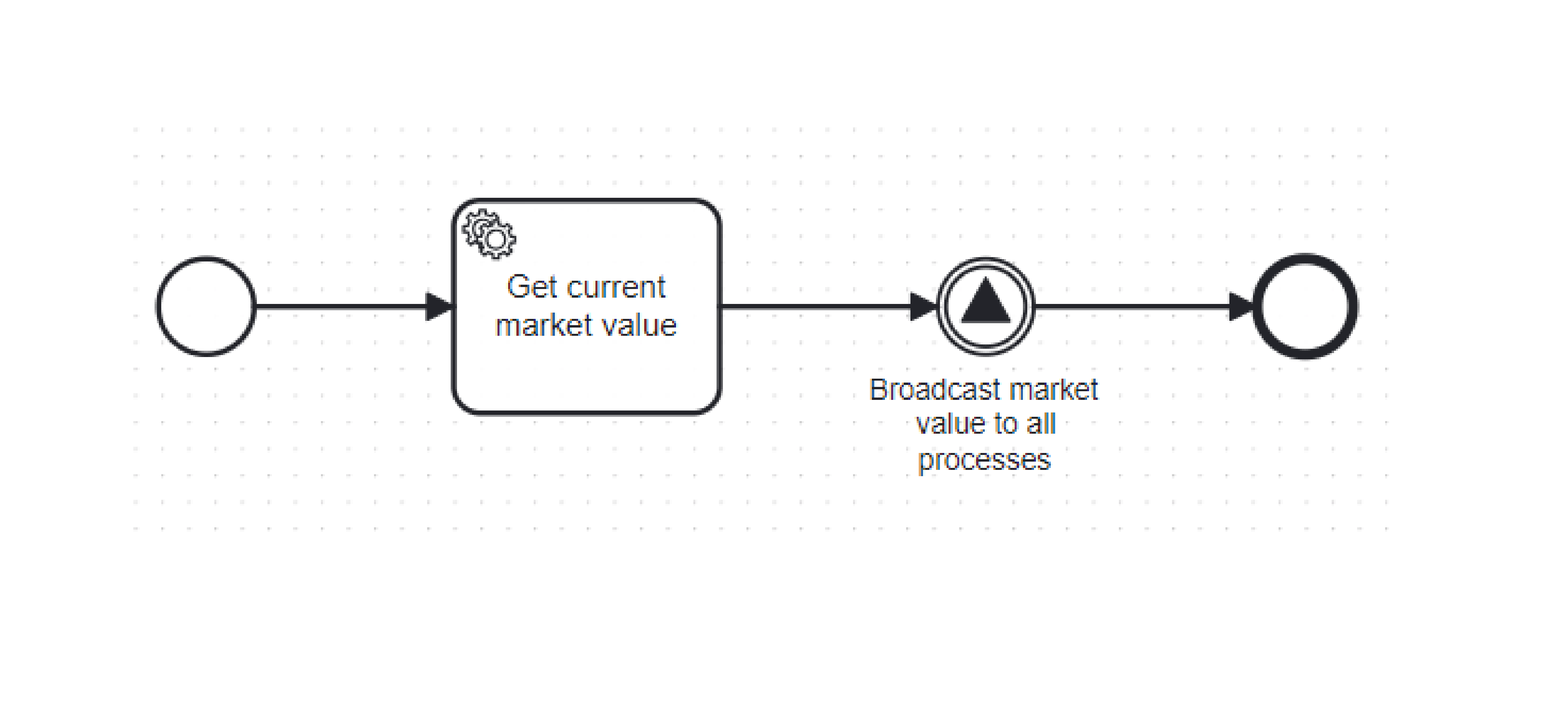
Note 2:
An easy way is to use collapsed pools for this.

4.3 Elements to avoid



Note 1:

When you think you need the Terminate end event or the Signal events, look for possible ways to avoid it.



Note 2:

There is probably a better way to model your process and maybe your models need a good refactoring.