

# Analisis Proses Bisnis

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# *Business Process Modeling Notation*



**UPDATED AND EXPANDED WITH EXCITING NEW CONTENT!**

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# BPMN 2.0 HANDBOOK SECOND EDITION

Methods, Concepts, Case Studies and Standards  
in Business Process Modeling Notation (BPMN)

Foreword by Dr. Bruce Silver

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**BPMN** Business Process Model and Notation  
(BPMN)

Version 2.0

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## Bizagi Process Modeler

User Guide

# Introducing



*Business Process Modeling Notation (BPMN) adalah notasi grafis yang menggambarkan logika dari langkah-langkah dalam proses bisnis.*

*Notasi ini telah didesain secara khusus untuk mengkoordinasikan urutan proses dan pesan yang mengalir antara peserta dalam kegiatan yang berbeda.*

# Introducing



*Business Process Modeling Notation (BPMN) dikembangkan oleh organisasi BPM initiative, yang dibuat oleh Object Management Group (OMG)*

*BPMN menjadi bahasa standar mengenai proses bisnis, seperti UML yang telah menjadi standar pemodelan perangkat lunak.*

# Mengapa penting untuk menggunakan BPMN?

- ❖ BPMN adalah standar proses pemodelan yang diterima secara internasional.
- ❖ BPMN adalah suatu metodologi pemodelan proses.
  - ❖ BPMN menciptakan jembatan standar yang mengurangi kesenjangan antara proses bisnis dan pelaksanaannya.
- ❖ Permenpan No 12 Tahun 2011 tentang Pedoman Penataan Tata Laksana (Business Process) yang merekomendasikan BPMN sebagai notasi untuk pemodelan business process

# Tujuan BPMN

Untuk menyediakan notasi yang dapat dengan mudah dipahami oleh semua pengguna bisnis.



# 4 Elements of BPMN

*Flow  
objects*

*Connecting  
objects*

*Swimlanes*

*Artifacts*

# 4 Elements of BPMN

ELEMENT	DEFINITION	BPMN NAME
Flow Objects	Flow objects are the main graphic elements that <b>define the behavior</b> of the <u>processes</u>	<u>Events</u>
		<u>Activities</u>
		<u>Gateways</u>
Connecting Objects	Flow objects are connected to each other by means of <b>connectors to create the basic framework</b> of the business process structure	Sequence <u>Flow</u>
		Message Flow
		Association
Swimlane	Swimlanes are mechanisms to arrange activities in separate display categories to illustrate <b>the different functional areas or persons in charge</b>	<u>Pools</u>
		Lanes
Artifacts	Artifacts are used to <b>provide additional information about the process</b> . They provide the <u>notation with flexibility to express different contexts</u> properly	Annotation
		Group
		Data Object
		Data Store

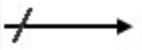
# Swimlanes

ELEMENT	DESCRIPTION	NOTATION
<b>Pool</b>	<ul style="list-style-type: none"><li>• A Pool is <b>a container of a single Process</b> (contains the sequence flows between activities)</li><li>• A Process is fully contained within the Pool. There is always at least one Pool</li></ul>	
<b>Lane</b>	<ul style="list-style-type: none"><li>• Is a <b>sub-partition within the Process</b></li><li>• Lanes are used to differentiate elements as internal roles, position, department, etc. They represent functional areas that may be responsible for tasks</li></ul>	
<b>Milestone</b>	Is a sub-partition within the Process. It can indicate <b>different stages during the Process</b>	

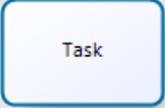
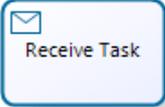
# Event

TYPE OF EVENT	DEFINITION	NOTATION
Start	As its name suggests, it represents the <b>starting point of a process</b>	
Intermediate	This <b>takes place between a start event and an end event</b> . It will affect the process, but it will not cause it to start or end directly	
End	Indicates when a <b>process ends</b>	

# Sequence Flow

ELEMENT	DEFINITION	NOTATION
Normal Flow	The normal line refers to <b>the path of the flow between two shapes</b> , and is not affected by conditions. The simplest use of this shape is a sequence between two activities.	
Conditional Flow	This <b>flow has a condition assigned that defines whether or not the flow is used</b> . It can be assigned to any shape in the process that requires to evaluate a condition in order to follow a certain path	
Default Flow	For decisions bases on <b>inclusive decisions</b> or data, a type of <b>path of the flow is that of "default" conditions</b> . This type of transitions takes place only if all the other conditions are false at the same time.	

# Activity

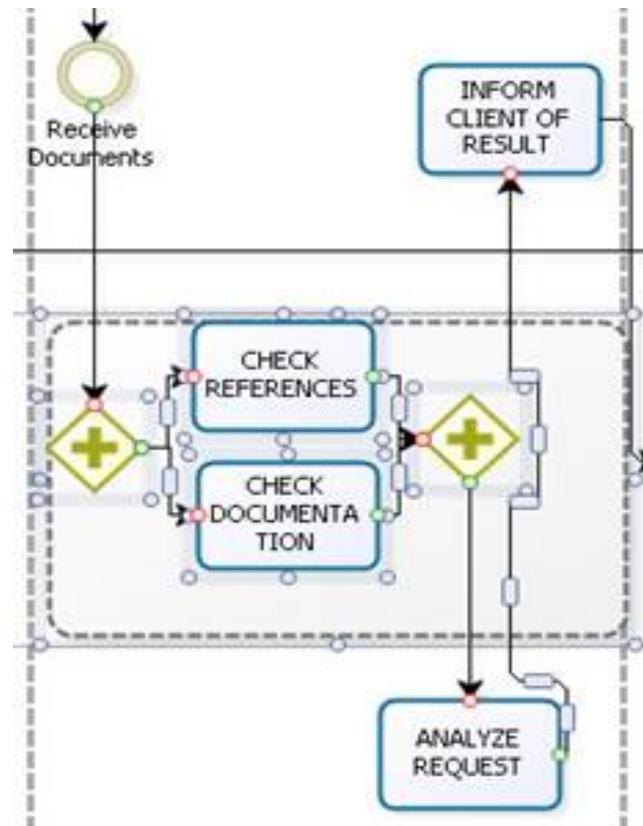
ELEMENTS	DESCRIPTION	NOTATION
<b>Task</b>	Is an <b>atomic Activity</b> within a Process flow. It is used when the work in the Process cannot be broken down to a finer level of detail	
<b>User Task</b>	Is a typical workflow Task where a <b>person performs the Task with the assistance of a software application</b>	
<b>Service Task</b>	Is a Task that <b>uses some sort of service that could be a Web service or an automated application</b>	
<b>Receive Task</b>	Is a Task designed <b>to wait for a message to arrive from an external participant</b> (relative to the Process)	
<b>Send Task</b>	Is a Task designed <b>to send a message to an external participant</b> (relative to the Process)	

# Gateway

ELEMENT	DESCRIPTION	NOTATION
<b>Exclusive Gateway</b>	As Divergence: It is used to create alternative paths within the Process, but <b>only one is chosen</b> . As Convergence: It is used to merge alternative paths.	 Exclusive gateway    Exclusive gateway
<b>Event Based Gateway</b>	Represents a branching point in the Process <b>where the alternative paths that follow the Gateway are based on Events that occur</b> . When the first Event is triggered, the path that follows that Event will be used. All the remaining paths will no longer be valid.	 Event Based Gateway
<b>Exclusive Event Based Gateway</b>	Is a variation of the Event based gateway and it is used to instantiate Processes. <b>One the Events of the Gateway configuration must be triggered</b> in order to create a Process instance.	 Exclusive Event Based Gateway
<b>Parallel Event Based Gateway</b>	Unlike the the exclusive Event based Gateway, <b>ALL the Events of the Gateway configuration must be triggered</b> in order to create a Process instance	 Parallel Event Based Gateway
<b>Parallel Gateway</b>	As Divergence: is used to create <b>alternative paths without checking any conditions</b> . As Convergence: is used to merge alternative paths, the gateway waits for all incoming flows before it continues.	 Parallel Gateway
<b>Complex Gateway</b>	As Divergence: is used to control complex decision points in the Process. It creates alternative <b>paths within the Process using expressions</b> . As Convergence: Allow continuing to the next point of the Process when a <b>business condition becomes true</b> .	 Complex Gateway
	As Divergence: represents a branching point where alternatives are based on conditional	

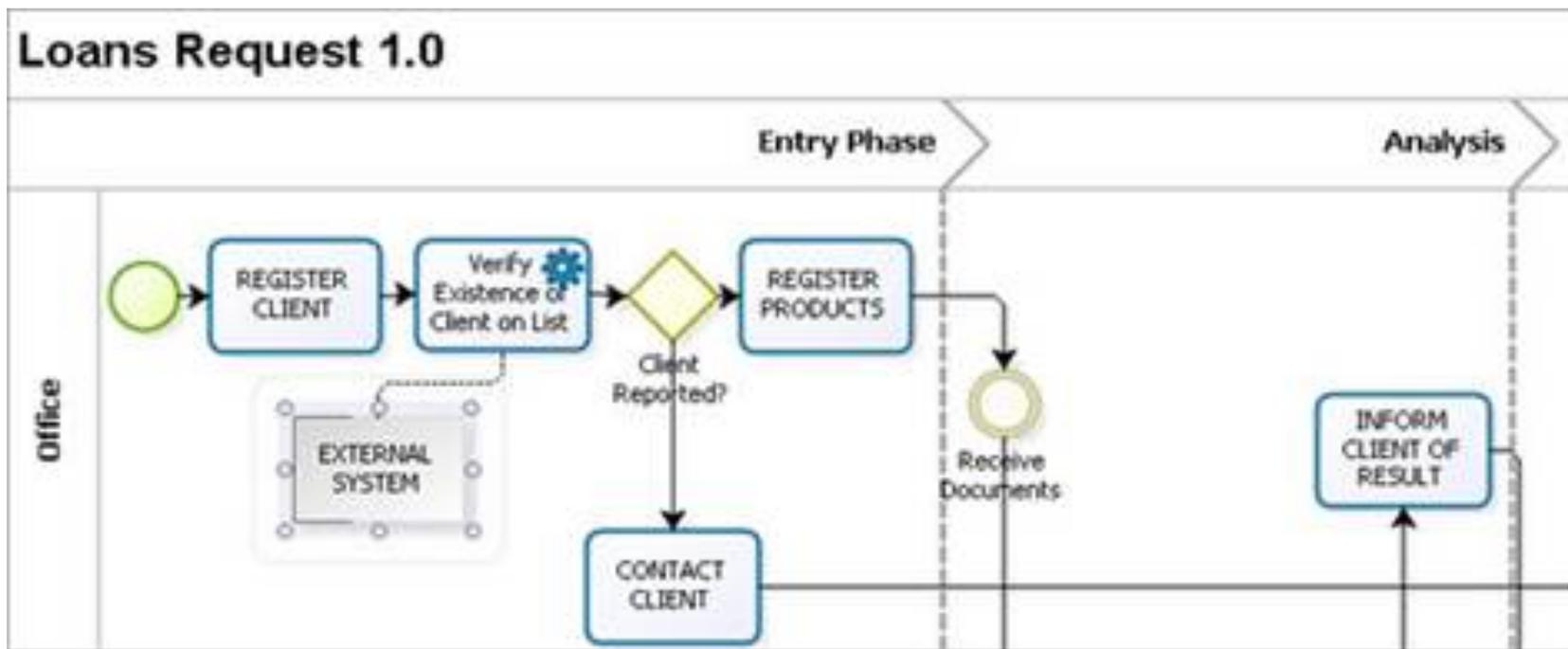
# Artifacts - Groups

Used to **group together a set of activities**, whether for the effects of documentation or analysis, however, it does not affect the flow sequence



# Artifacts - Annotations

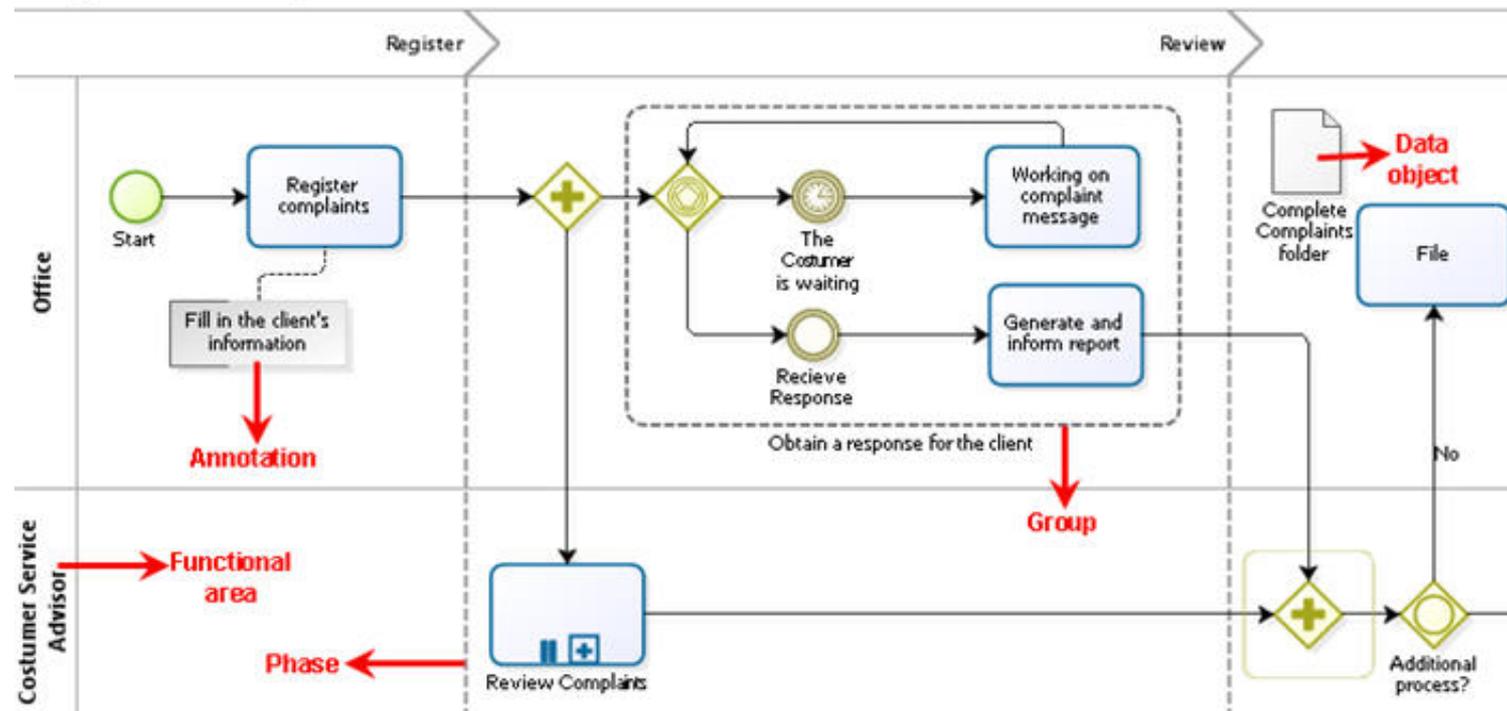
Mechanisms for a modeler to be able to provide **additional information** in a BPMN diagram



# Artifacts – Data Objects

Provide information about **how documents, data and other objects are used and updated during the process**. Can be used to represent electronic and physical objects

Complaint Handling 1.0



# Artifacts – Data Store

Provides a mechanism for activities to **retrieve or update stored information** that will exist beyond the scope of the process

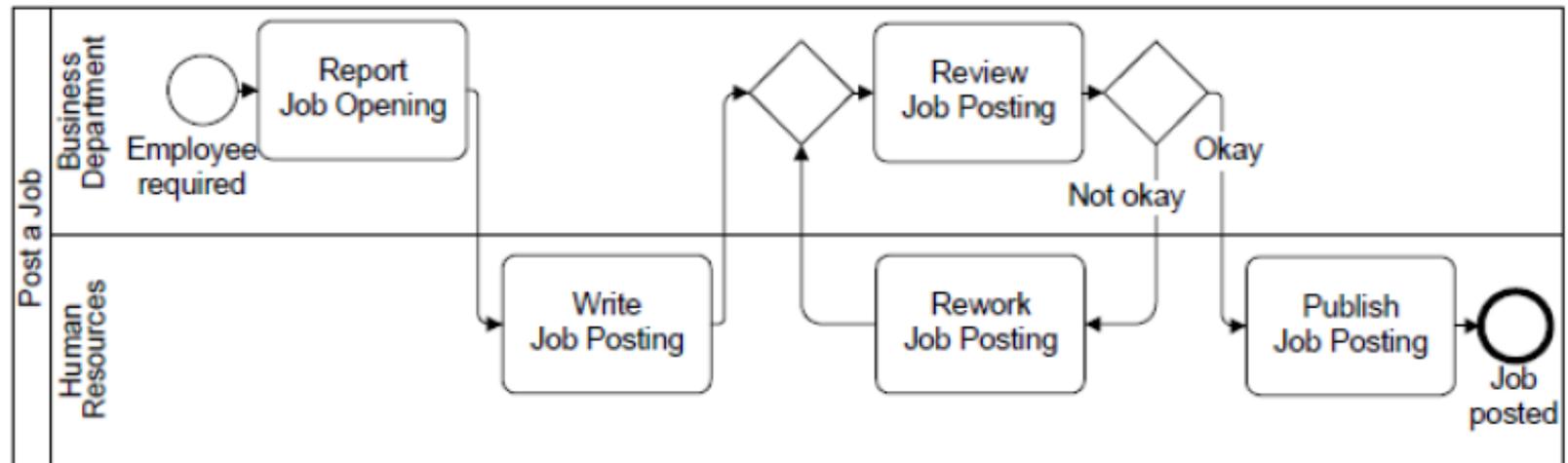


# Contoh 1#

Sebagai langkah awal, model BPMN proses sederhana.

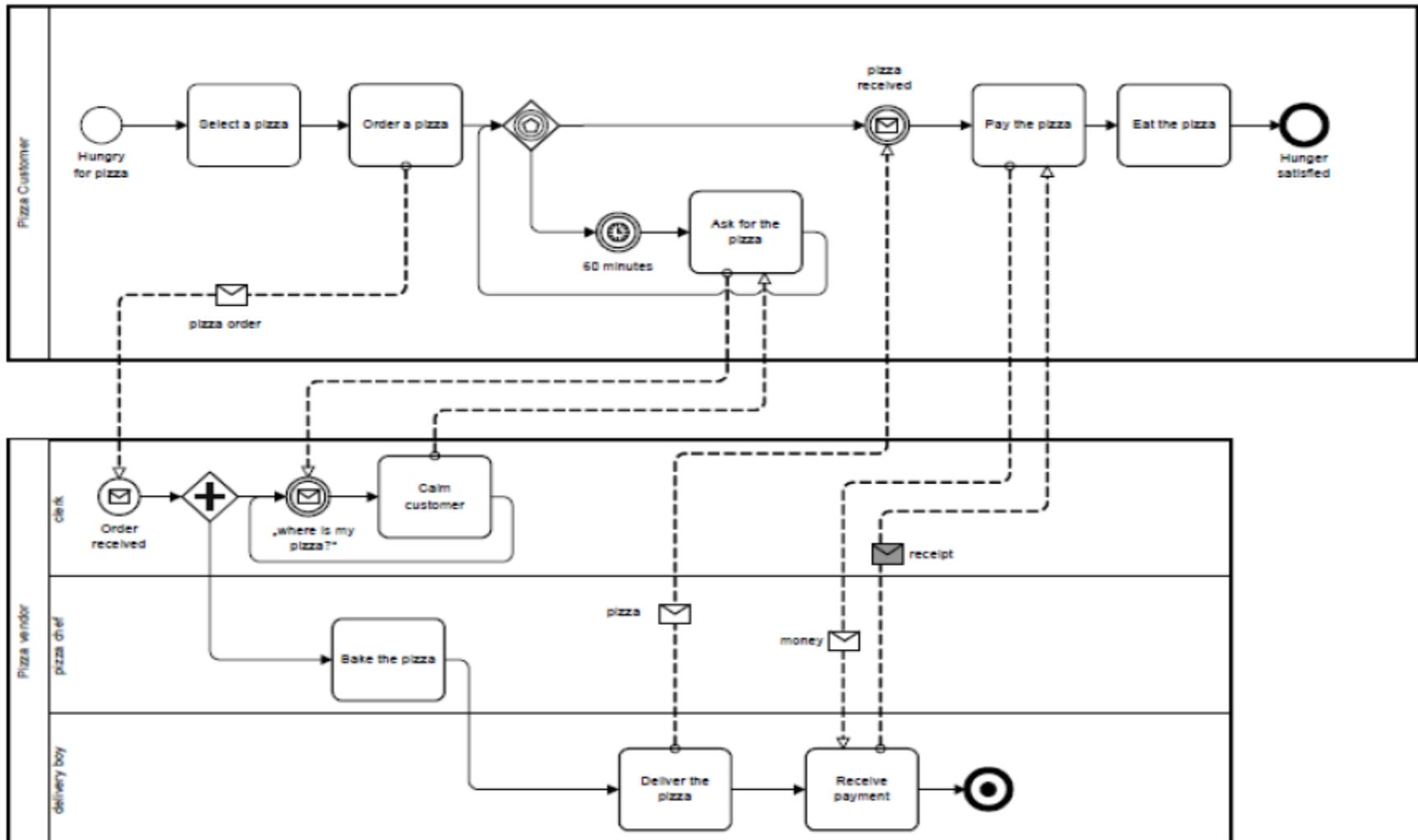
## Model posting

Cara pemodelan mirip dengan terkenal flow chart dan diagram aktivitas.

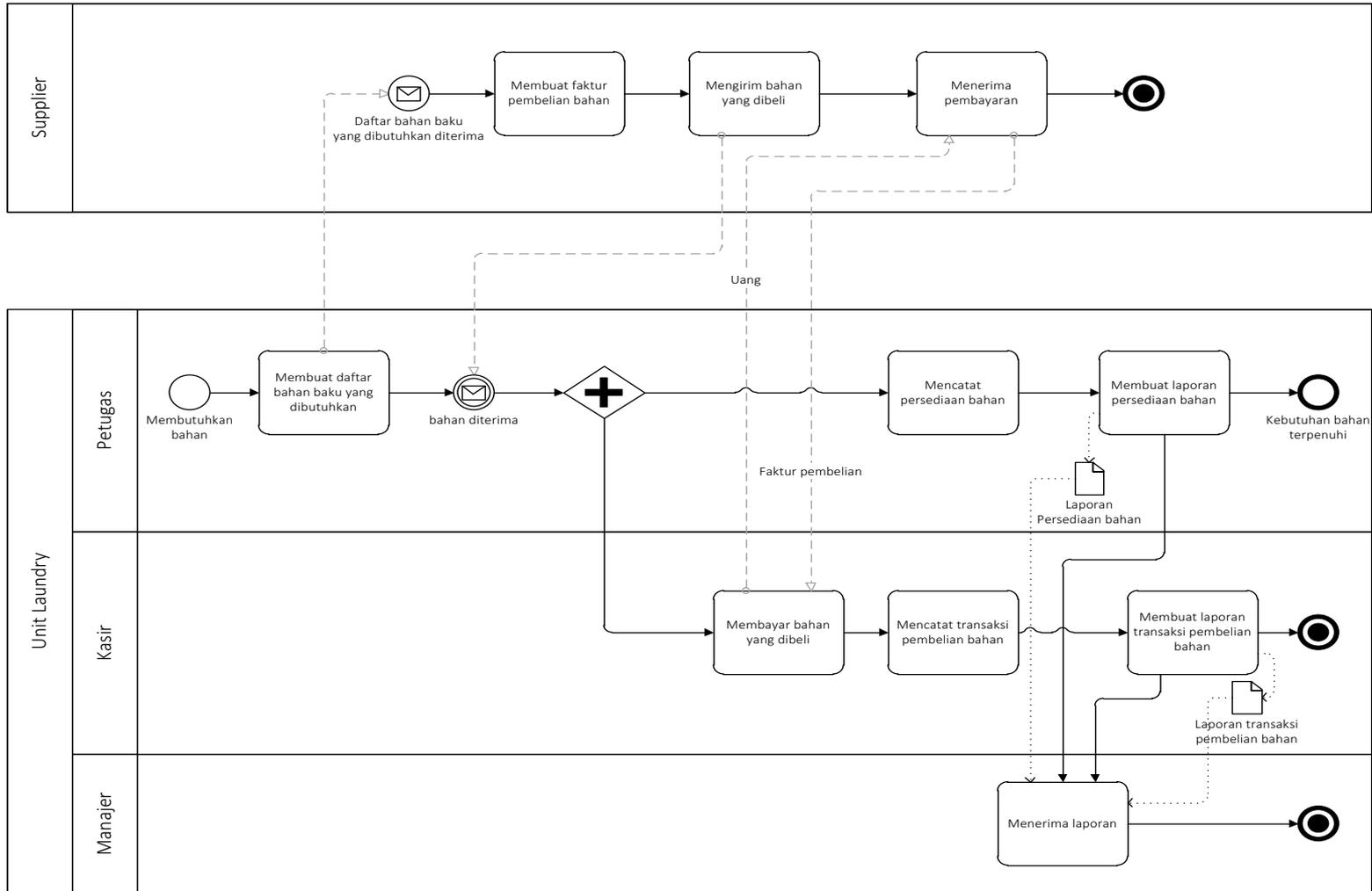


Pada kenyataannya, proses untuk membuat dan menerbitkan posting pekerjaan dapat jauh lebih kompleks dan luas. Contoh yang disajikan adalah penyederhanaan untuk memiliki model kecil dan mudah dimengerti yang dapat digunakan untuk menjelaskan BPMN elemen yang berbeda.

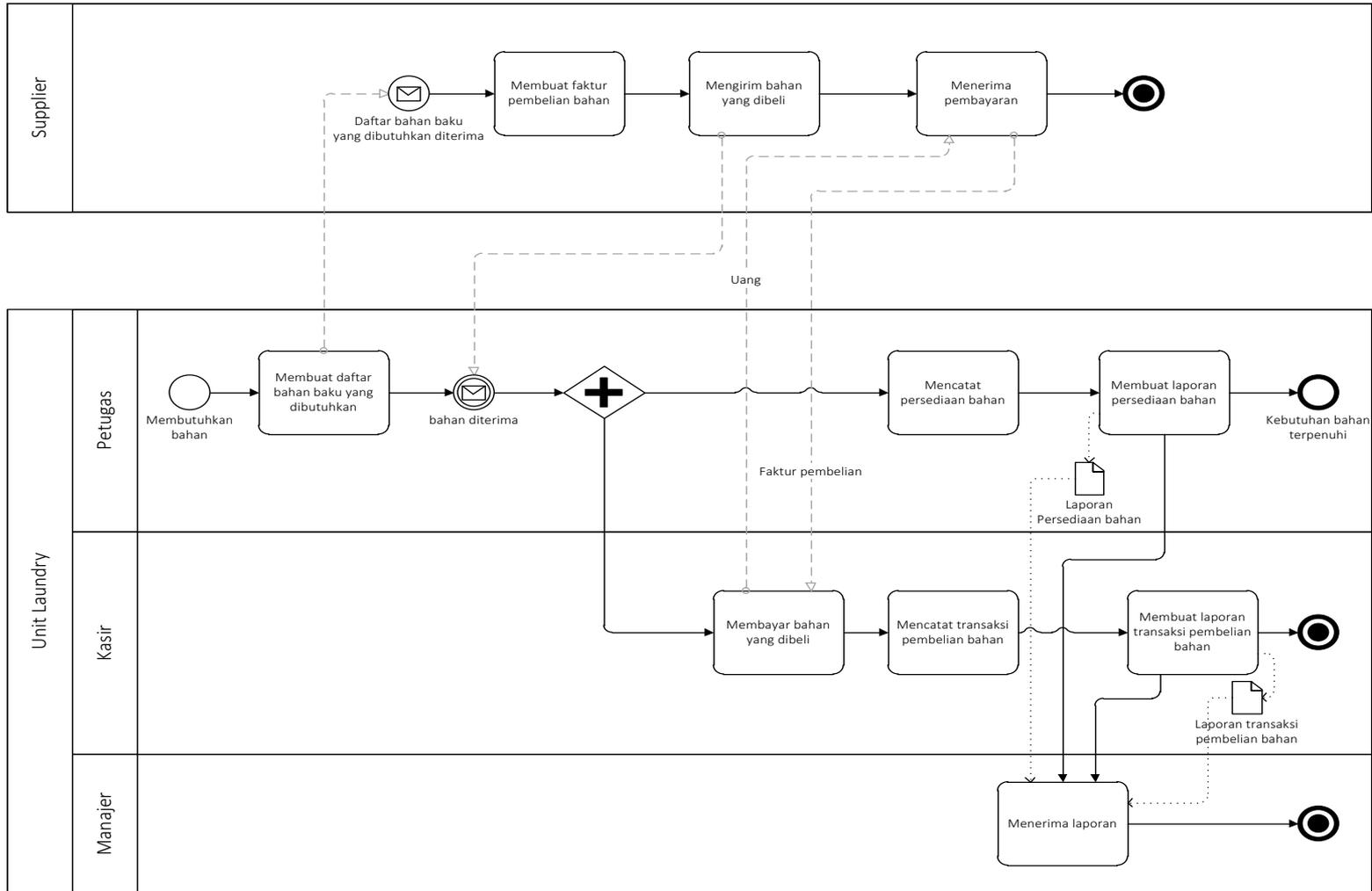
# Contoh 2#



# Contoh 3#



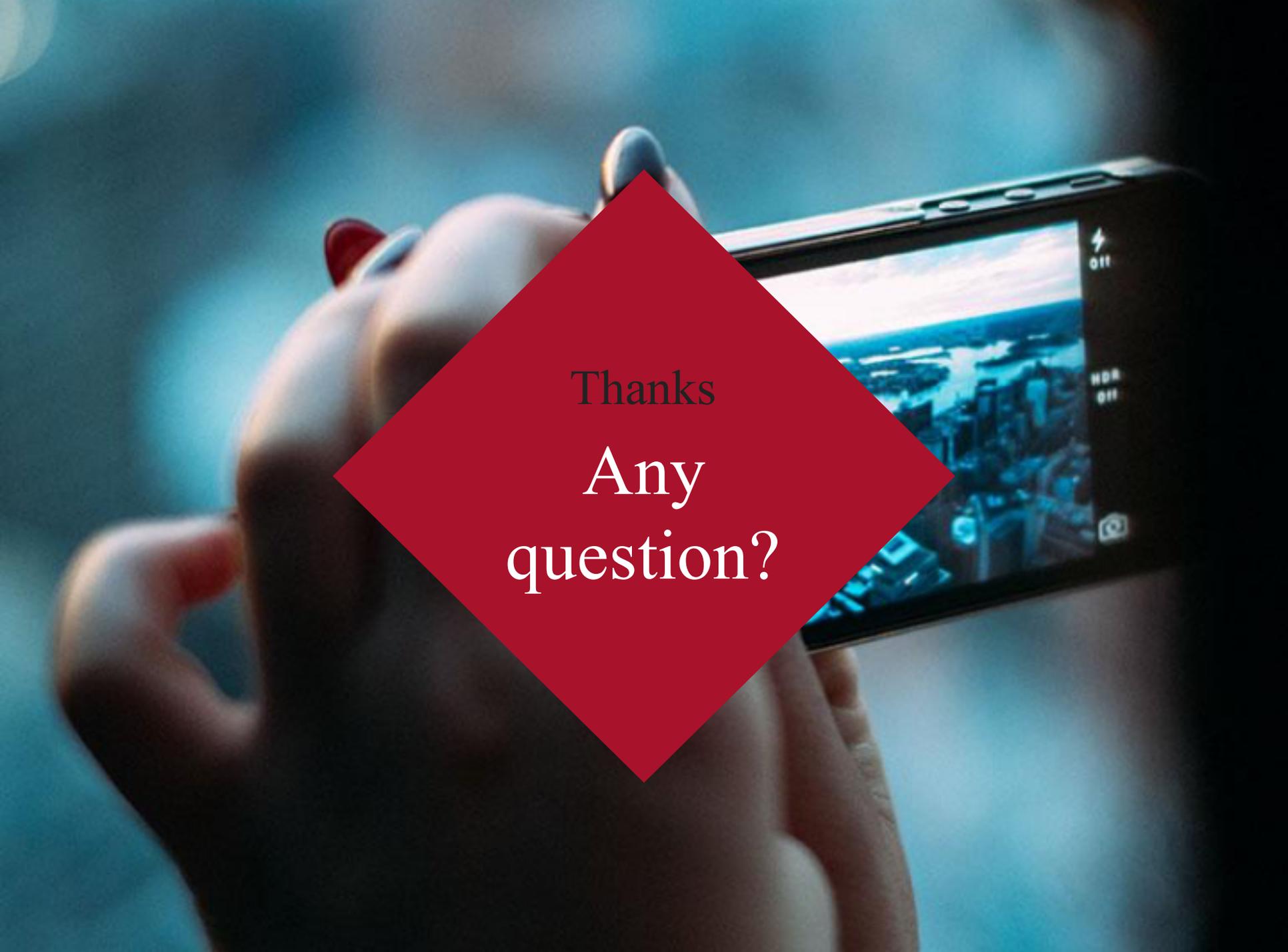
# Contoh 3#





## *TUGAS -2*

- 1. Buat BPMN untuk **Proses Pengadaan Barang**. Unit kerja yang berhubungan dengan proses ini adalah Divisi Pemohon, Divisi Pengadaan Barang, Divisi Keuangan, dan Supplier BPMN harus mudah dipahami*
- 2. Cari dan jelaskan secara rinci apa itu Workflow Management System!*

A hand holding a smartphone, with a red diamond overlay in the center containing the text "Thanks Any question?". The phone screen shows a cityscape at sunset. The background is a blurred blue sky.

Thanks  
Any  
question?