CAMUNDA AND VU!

A PRESENTATION IN 2 PARTS

1. BPMN and Business Process Modeling
2. The Camunda Engine

PART 1

BPMN

BPMN

BPMN Stands for "Business Process Model and Notation"

Considered "one of the one of the most important components of successful Business-IT Alignment"
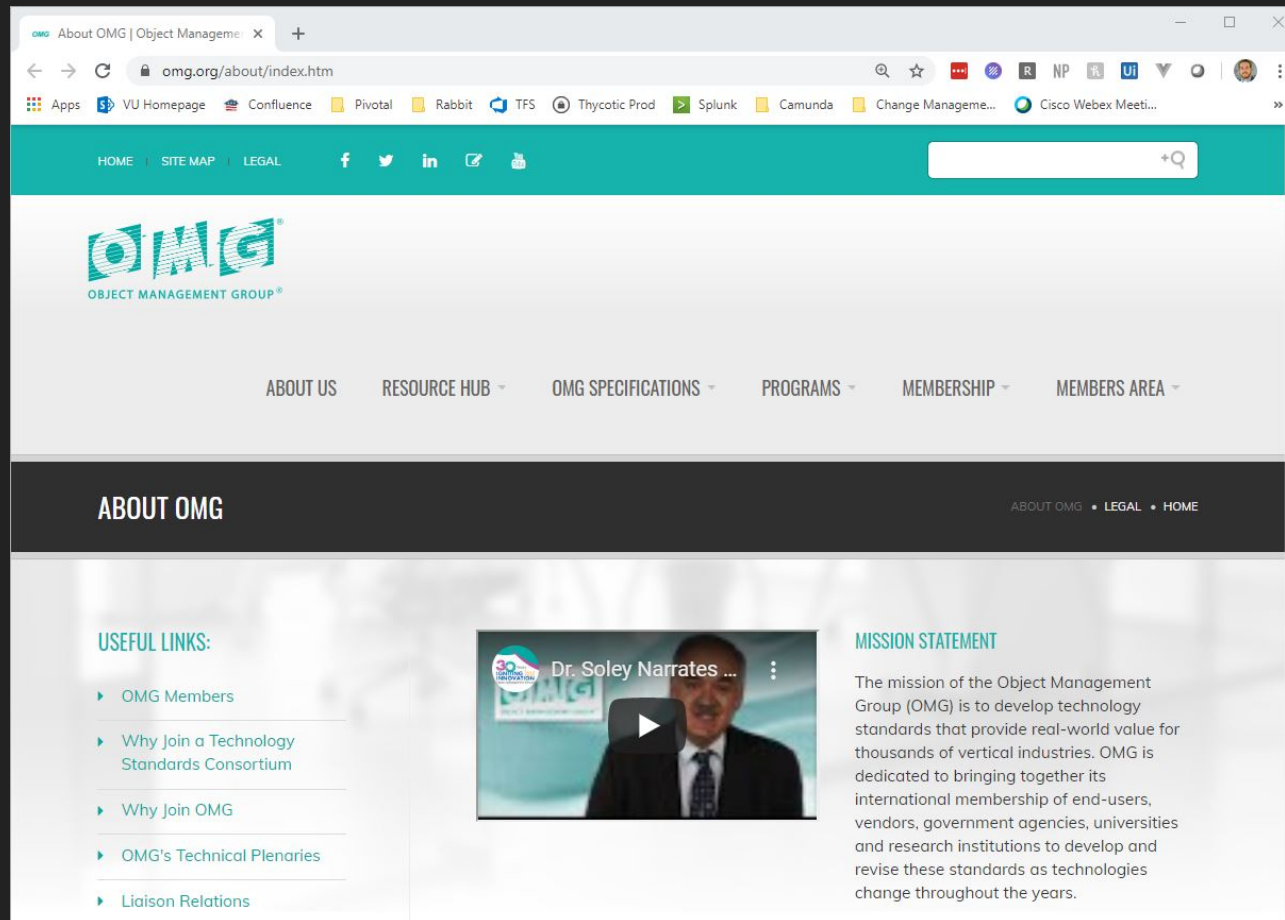
- Camunda

BPMN

Why use BPMN?

- Standard
- Simplicity
- Power of Expression
- Implementation in IT

BPMN

Not Owned by Camunda, but by OMG

BPMN

Not Owned by Camunda, but by OMG
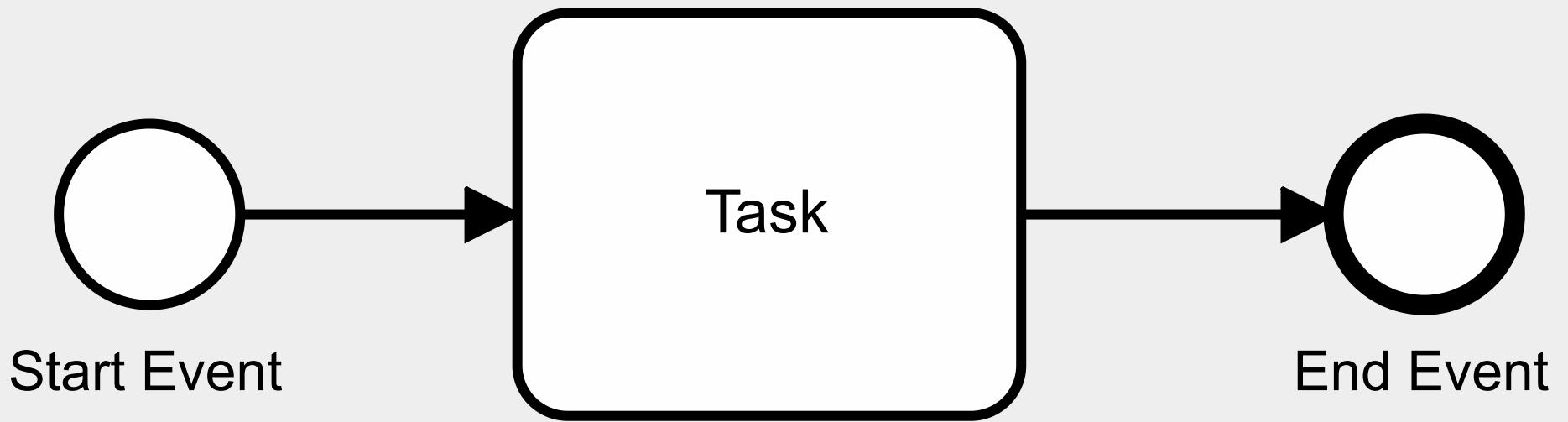
No vendor lock-in!

WHAT DOES BPMN LOOK LIKE?

Let's take a quick look at what BPMN diagrams look like

⚠️ **WARNING** ⚠️

All workflows shown in this presentation are extremely over-simplified!

If you happen to work in a system that is shown, please know that I know that the actual process is much more complicated than shown!

OUR FIRST WORKFLOW

Start Event

Task

End Event

TASK TYPES

User Task

Service Task

Receive Task

Script Task

STRING TASKS TOGETHER TO FORM A WORKFLOW

Get Borrower Employer Address → Verify Employer Address → Calculate Commute Fees → Update Encompass

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GATEWAYS

Is Credit Good Enough?

Get Borrower Credit Score

X — Yes → Send Approval Letter

No → Send Denial
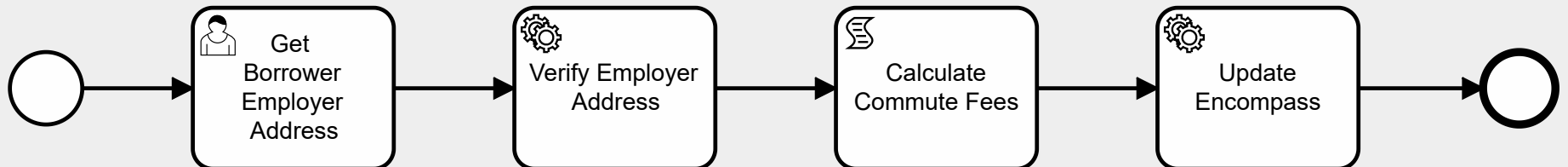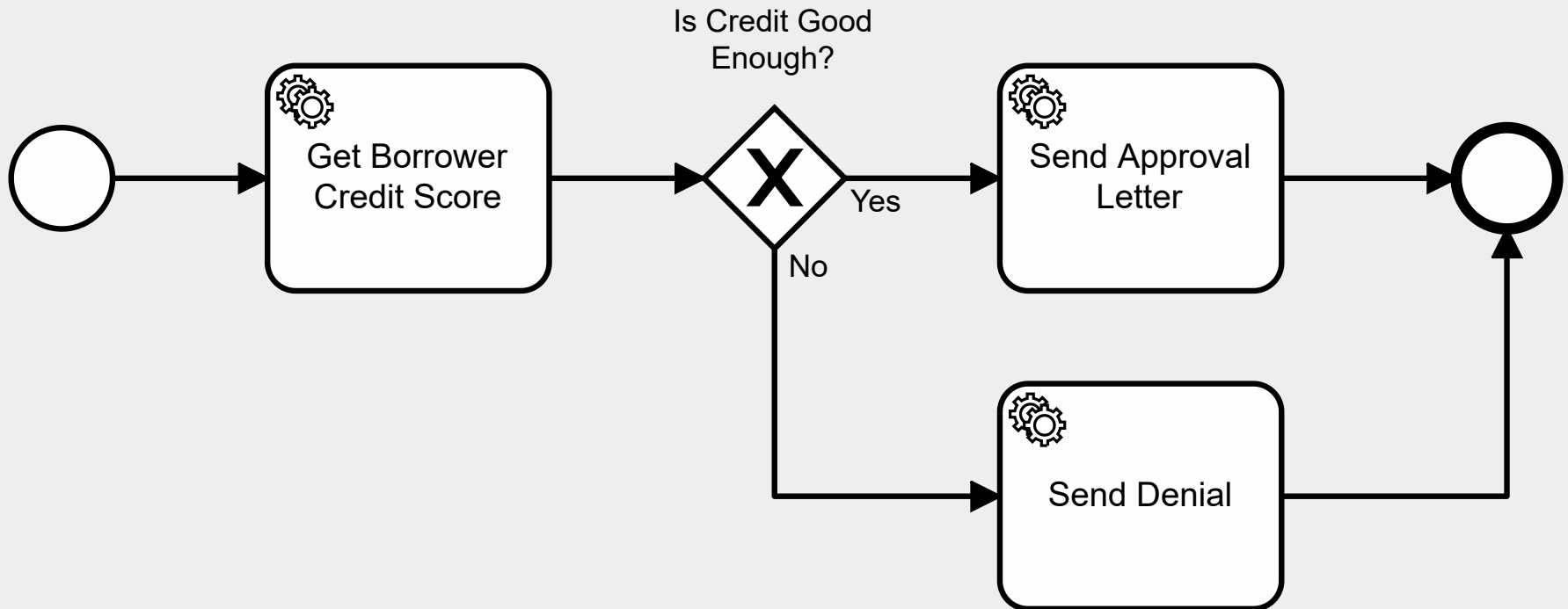
GATEWAY TYPES
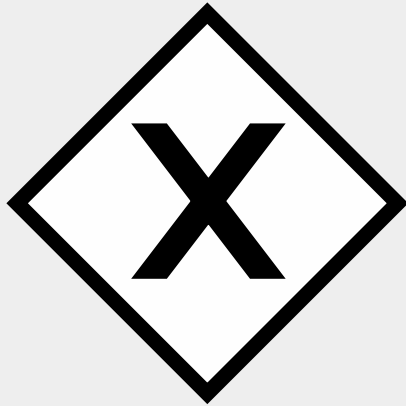
Exclusive
Gateway
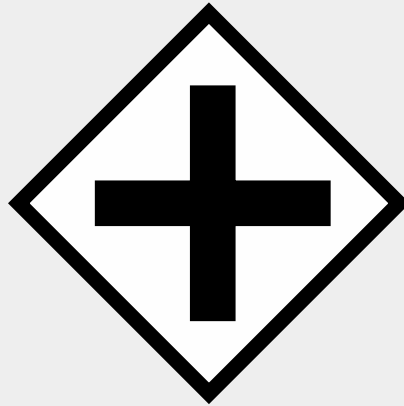
Parallel
Gateway
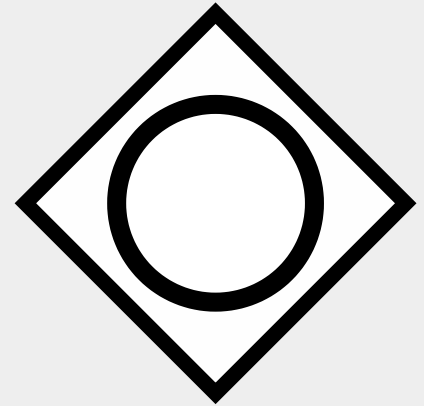
Inclusive
Gateway

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PARALLEL IN ACTION

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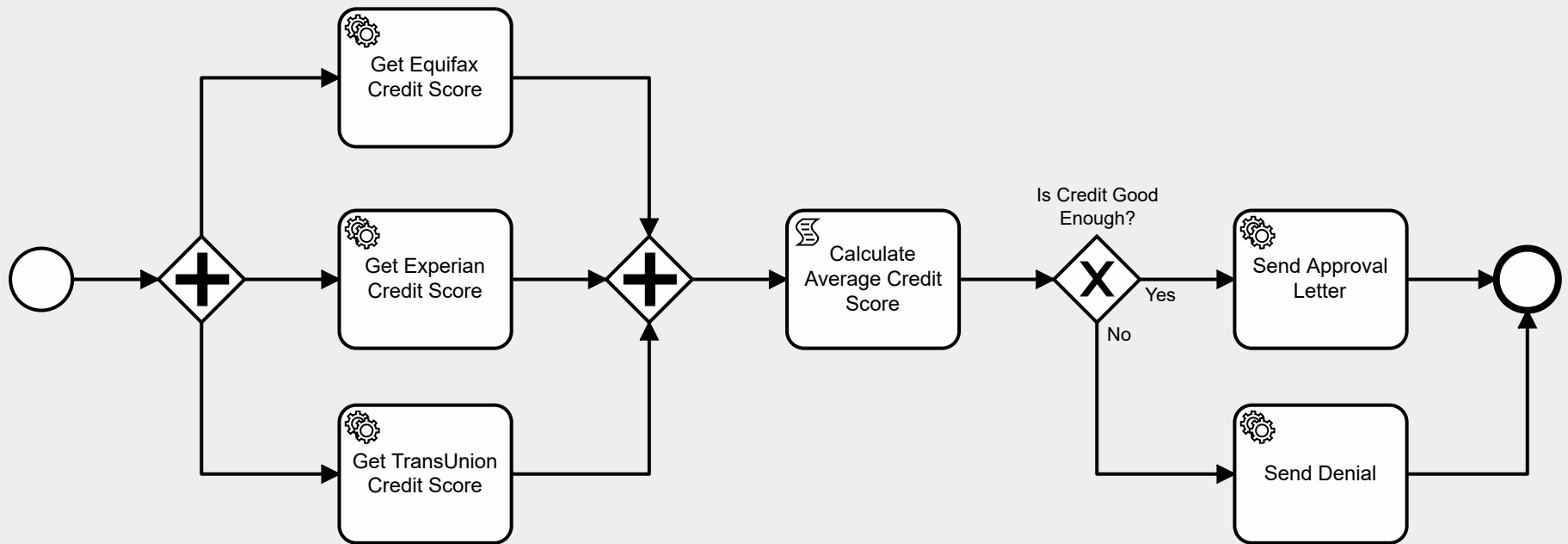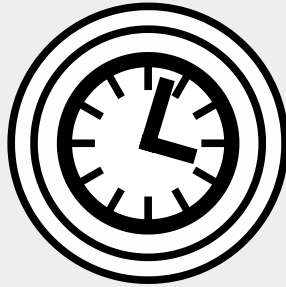
EVENTS

Timer Event
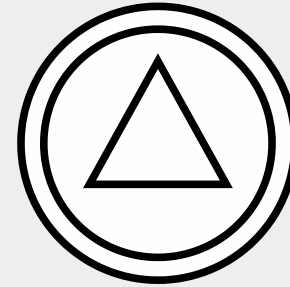
Signal Catch Event

EVENTS IN ACTION
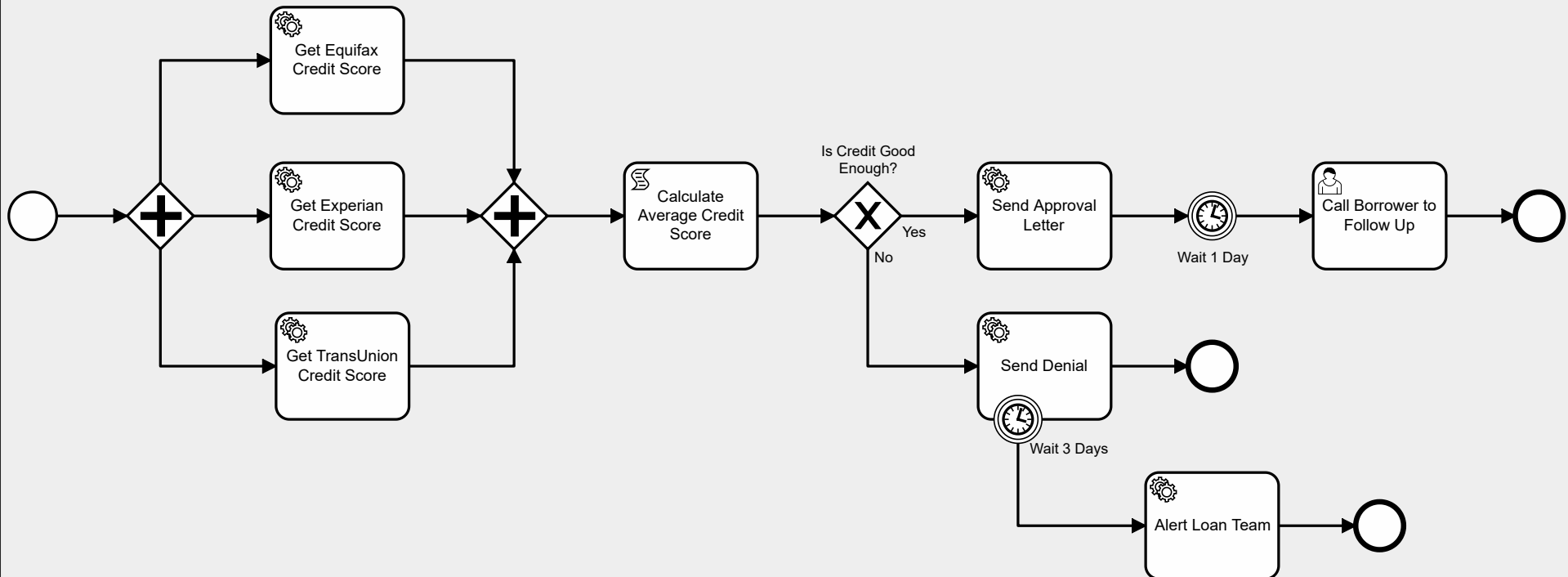
LET'S LOOK AT A BIGGER EXAMPLE

P&P Coordinator

Identify Topic and Presenter → Confirm Date and Topic with Presenter → ✉ → ✕ Does presenter agree to present? (No / Yes) → Update Confluence with Presenter Details → The Week Before P&P → Follow Up with Presenter → ✉ → ✕ Does presenter still agree to present? (No / Yes) → Panic / Send out P&P Calendar Invites → Day of P&P → Order Pizza for Presenter →

P&P Presenter

Presentation Request Received → ✕ Can I do Presentation? (No / Yes) → Reject Presentation Request / Confirm with Coordinator → Follow Up Received → ✕ Can I Still Do Presentation? (No / Yes) → Send Appology and Back Out / Cornfirm with Coordinator → Write Up Presentation → Day of P&P → Receive Pizza → Give Presentation

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IT'S ALL XML TO ME

```xml
<?xml version="1.0" encoding="UTF-8"?>
<bpmn:definitions xmlns:bpmn="http://www.omg.org/spec/BPMN/20100524/MODEL" xmlns:blende="http://www.omg.org/sp
<bpmn:process id="Process_0634gnj" isExecutable="true">
<bpmn:startEvent id="StartEvent_1">
    <bpmn:outgoing>Flow_0y3szz2</bpmn:outgoing>
</bpmn:startEvent>
<bpmn:sequenceFlow id="Flow_0y3szz2" sourceRef="StartEvent_1" targetRef="Gateway_0eppg4y" />
<bpmn:sequenceFlow id="Flow_0f1801u" sourceRef="Gateway_0eppg4y" targetRef="Activity_1jr4pk0" />
<bpmn:parallelGateway id="Gateway_0eppg4y">
    <bpmn:incoming>Flow_0y3szz2</bpmn:incoming>
    <bpmn:outgoing>Flow_0f1801u</bpmn:outgoing>
    <bpmn:outgoing>Flow_0g0fqyu</bpmn:outgoing>
    <bpmn:outgoing>Flow_0wtg7rz</bpmn:outgoing>
</bpmn:parallelGateway>
<bpmn:sequenceFlow id="Flow_0g0fqyu" sourceRef="Gateway_0eppg4y" targetRef="Activity_0u3a9p8" />
<bpmn:sequenceFlow id="Flow_0wtg7rz" sourceRef="Gateway_0eppg4y" targetRef="Activity_0im9np5" />
```

PART 2
CAMUNDA

WHAT IS CAMUNDA

- Open-Source Workflow Automation Platform
- BPMN Standard Compliant Workflow Engine

WORKFLOW AUTOMATION

Camunda allows us to execute our workflows

Let's see what this looks like in the Camunda Cockpit

COCKPIT OVERVIEW

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COCKPIT OVERVIEW

COCKPIT OVERVIEW

PART 3

WHY WE LIKE CAMUNDA

DEVELOPER INSIGHT

- Visual Workflow
- Amazing REST Interface
- Built-in Versioning
- Handles State-Machine Logic
- Application Visibility

PRODUCT STRATEGY INSIGHT

- Visual Workflow
- Increased Productivity
- Logging/Debugability for Free
- Built-in Metrics
- Changes to a Workflow are Usually Faster

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- Matt U.

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Unlike the past 6 years, we can't feasibly keep big chunks of the burden off SS's plate by having PS bury large swaths of it in Encompass.

Yeah, SS _CAN_ code it all in Javascript and/or C#, but if a tool like this makes workflows easier for developers to maintain and scale business logic heavy workflows, then we should make an effort to get familiar with it and use it."

TRADE-OFFS

- Have to build tools around Camunda
- Yet Another Tool to Maintain (YATM)
- Unfamiliarity with BPMN/Camunda

REAL USE CASES

- RPA Workflow Automation
- Asynchronous Processing (Part One | Part Two)
- Long-running Synchronous Processes

GETTING STARTED

- Talk with your Friendly Neighborhood Architect
- Join the #product-camunda Slack channel
- Reach out to a team that has Camunda experience
  - Team Bard - Ops
  - Velocity Raptors - Sales

QUESTIONS

Question Asked → Think about question → Do I know the answer? (X)
- Yes → Answer question with confidence → (end)
- No → Panic → Make something up → (end)

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