

**CAMUNDA**  
**CON** 2023

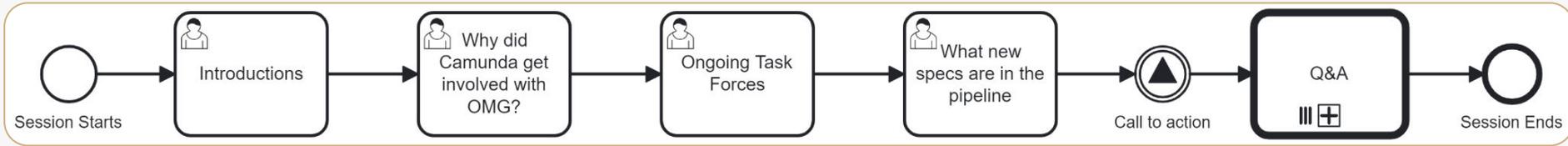
# **Collaborating for standards-based process and decision automation**

The partnership between Camunda and OMG

Falko Menge & Marco Lopes



# Agenda



# Marco Lopes



**Marco Lopes**

Senior Sales Engineer

Open Standards Enthusiast

- 10+ years experience in Process Automation
- 1+ years experience in Open Standards
  - Member of BPMN Model Interchange Working Group



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**Falko Menge**

Senior Principal Solution Architect

Open Standards Ambassador

- 15+ years experience in Process Automation
- 10+ years experience in Open Standards
  - Chair of DMN Revision Task Force at the OMG
  - Member of BPMN, CMMN, KPMN, SDMN & DD Task Forces
  - Member of BPMN Model Interchange Working Group
  - Chair of BPMN MIWG Test Automation Subgroup
  - Member of DMN Technology Compatibility Kit at WfMC
  - Member of Serverless Workflow Working Group at CNCF
  - OCEB 2.0 Exam Question Author



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# History of Process Modeling



## Pre-BPMN

Workflow Patterns

BPEL, WSDL, SOAP

YAWL, Workflow Nets

FMC Petri Nets

Pi Calculus

## BPMN

BPMN 1.x

BPMN 2.0 FTF

BPMN MIWG

BPMN Extensions:  
Color, I18n, Decorator

OCEB 2.0  
Certification Author

## BPM Trio

DMN 1.x

WfMC DMN TCK

FEEL for BPMN

CMMN 1.1

Serverless Workflow

## BPM+

KPMN

SDMN

BHM

SCE

PPMN

# Evolution of Process Modeling Standards



before 2009

**BPMN 1.x Notation**

**Workflow Patterns**

**BPEL, WSDL, SOAP**

**UML Activity Diagram**

**Flow Charts, Petri Nets,  
YAWL, Workflow Nets**

2010-2015

**BPMN 2.0  
Model & Notation**

**BPMN Model Interchange  
Working Group (MIWG)**

**BPMN Extensions:  
Color, I18n, Decorator**

**OMG Certified Expert  
in BPM (OCEB)**

**Case Management  
(CMMN 1.1)**

2016-2020

**DMN 1.x**

**DMN Technology  
Compatibility Kit (TCK)**

**FEEL for BPMN**

**OMG Certified Expert  
in BPM 2 (OCEB 2)**

**CNCF  
Serverless Workflow**

2021+

**Knowledge Package  
(BKPMN)**

**Shared Data (SDMN)**

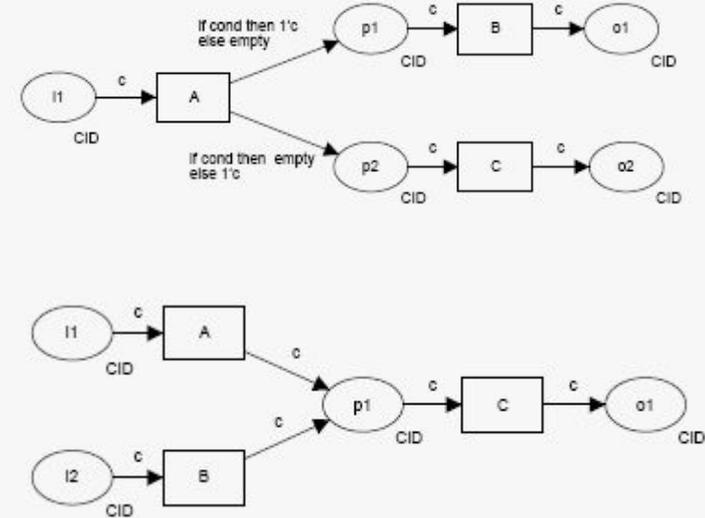
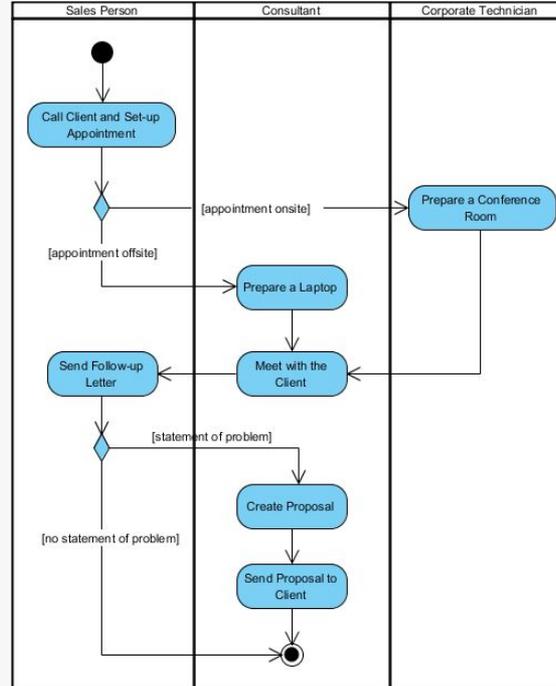
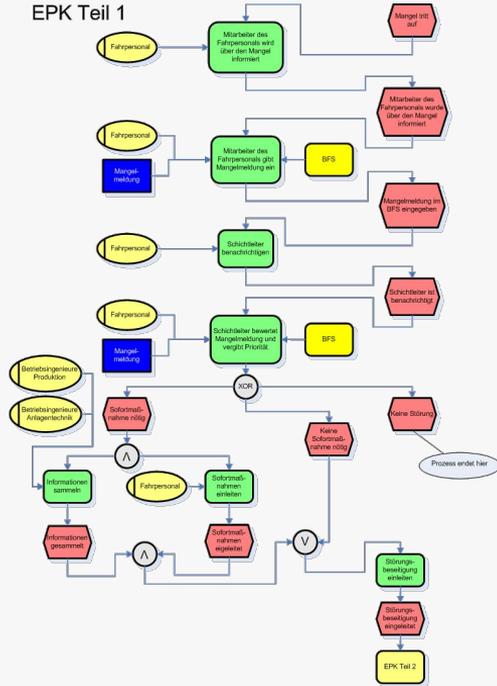
**Harmonization (BHMN)**

**Specification Core  
Elements (SCE)**

**Pedigree & Provenance  
(PPMN)**

# How did you get to know BPMN?

EPK Teil 1



# Open Standards enable...

- **Universities** teach & research
- Standards are more generic & vendor-neutral
- Companies can hire BPMN knowledge straight out of university

[bpm-conference.org](http://bpm-conference.org)



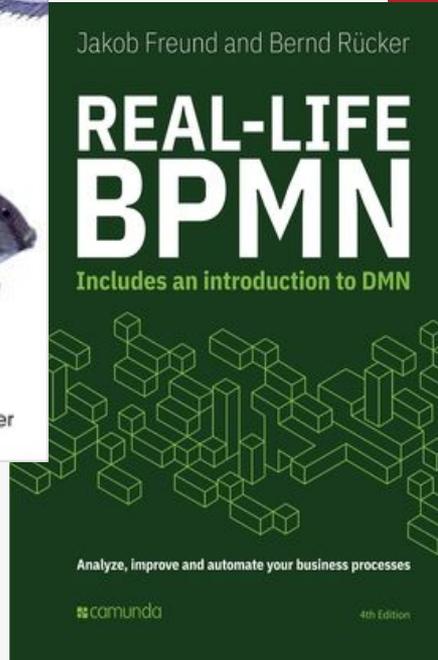
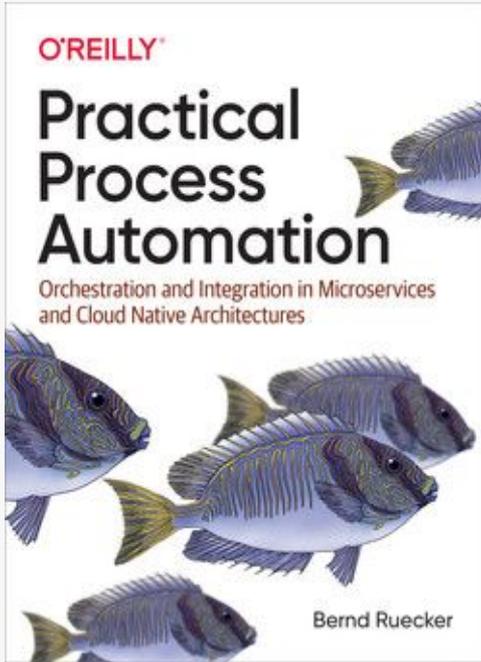
# Open Standards enable Universities to teach & research

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2023

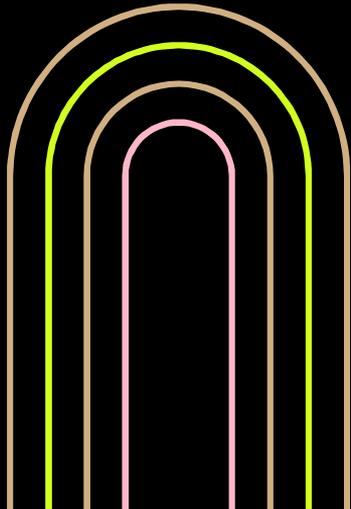


[bpm-conference.org](http://bpm-conference.org)

# Why did Camunda join OMG?



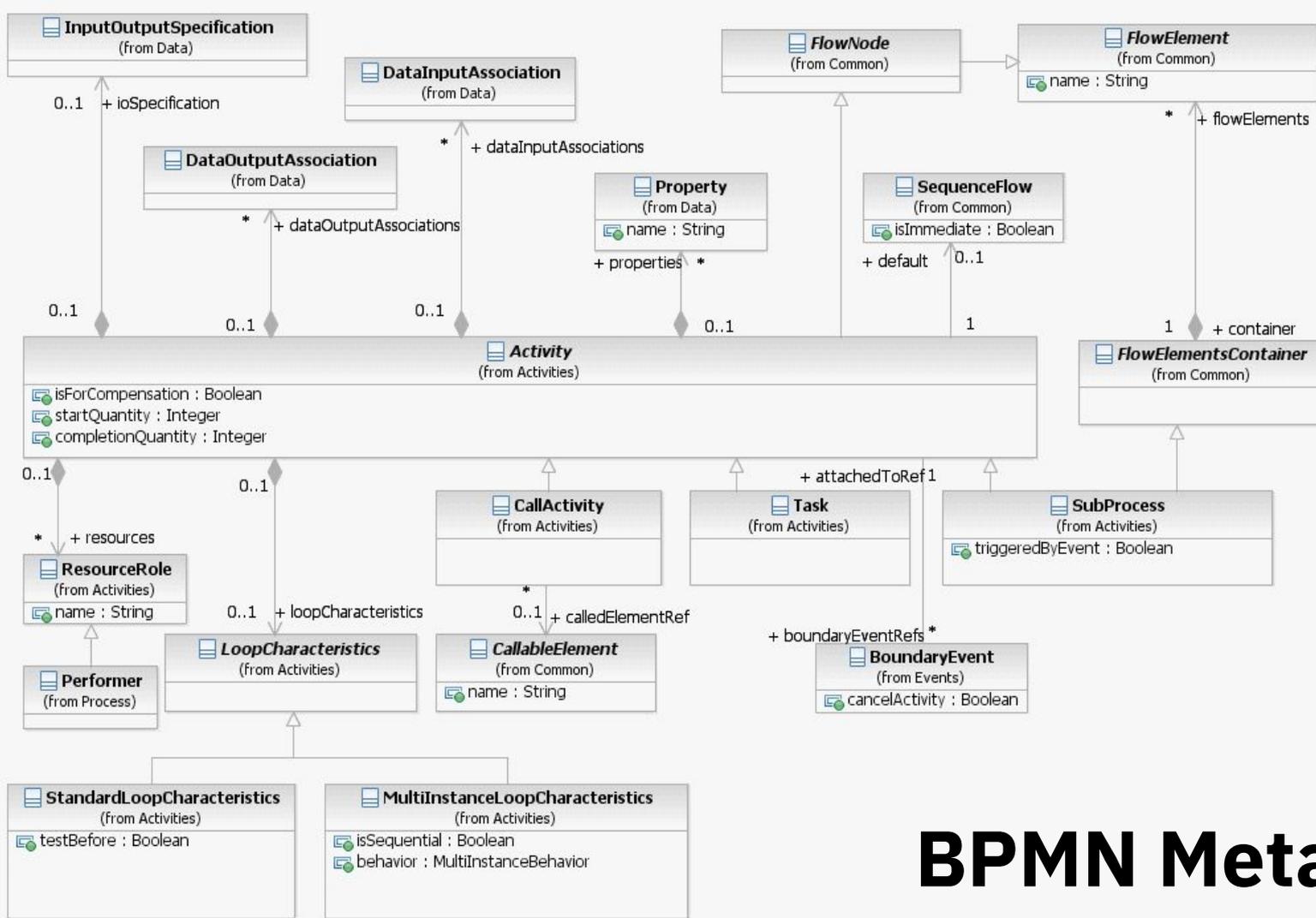
# Open Standards enable...



- Common knowledge in the process automation community, e.g. execution semantics of BPMN
- Publishing technology-agnostic books
- Providing training to both business and IT simultaneously

# What does the standardization work look like?





# BPMN Meta Model

# BPMN 2.0 Face 2 Face Meeting 2010

CCON  
2023



# Camunda Modeler Evolution

The screenshot displays the Camunda Modeler interface. At the top, the browser window title is "Modelling - Desktop/InvoiceProcess.bpmn - Modeler". The breadcrumb navigation shows "Home > CCon23 > Morning routine". The user is identified as "Marco Lopes's Organi...". The main workspace is in the "Implement" tab, with a status bar indicating "Autosaved at 15:05:28".

The BPMN diagram illustrates a morning routine process:

- Starts with an "Early" start event.
- Followed by a "Wake up" user task.
- Then a decision gateway labeled "Heard Alarm".
- If "Yes", it proceeds to a "Switch of alarm" user task.
- If "No", it proceeds to a "Check Time" user task.
- Both paths lead to a second decision gateway.
- From the second gateway, the process continues to a "Continue Sleeping" user task.

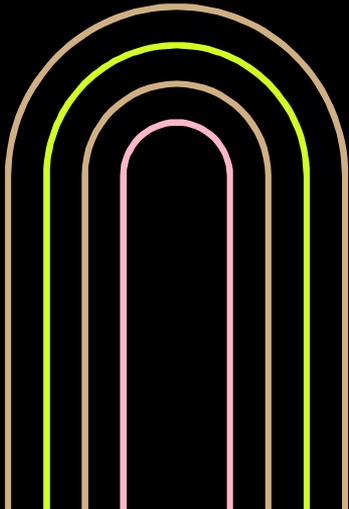
The "Check Time" task is currently selected, and its details are shown in the right-hand panel:

- Properties:** USER TASK, Check Time
- General:** Name: Check Time, ID: checkTime
- Documentation:** Element documentation (empty text area)
- Template:** + Select
- Assignment:** Assignee: fx

At the bottom left, there is a "Problems" indicator with a count of 1. At the bottom right, a status bar indicates "Check problems against: Zeebe 8.2".

# Open Standards enable...

- Standing on the shoulders of giants, i.e. **smart people** from many vendors & universities try to find the best solution for the customers
- Great combination of research & engineering

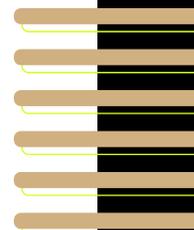
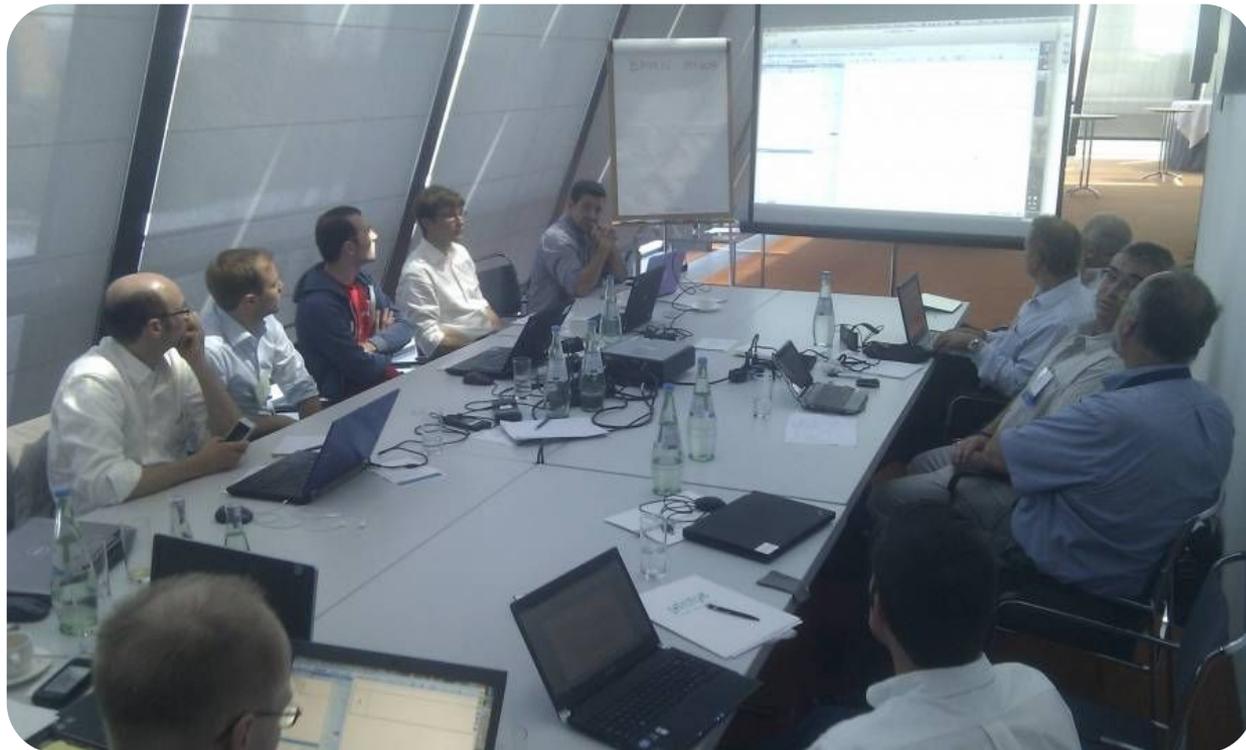


# Ongoing Collaborations.

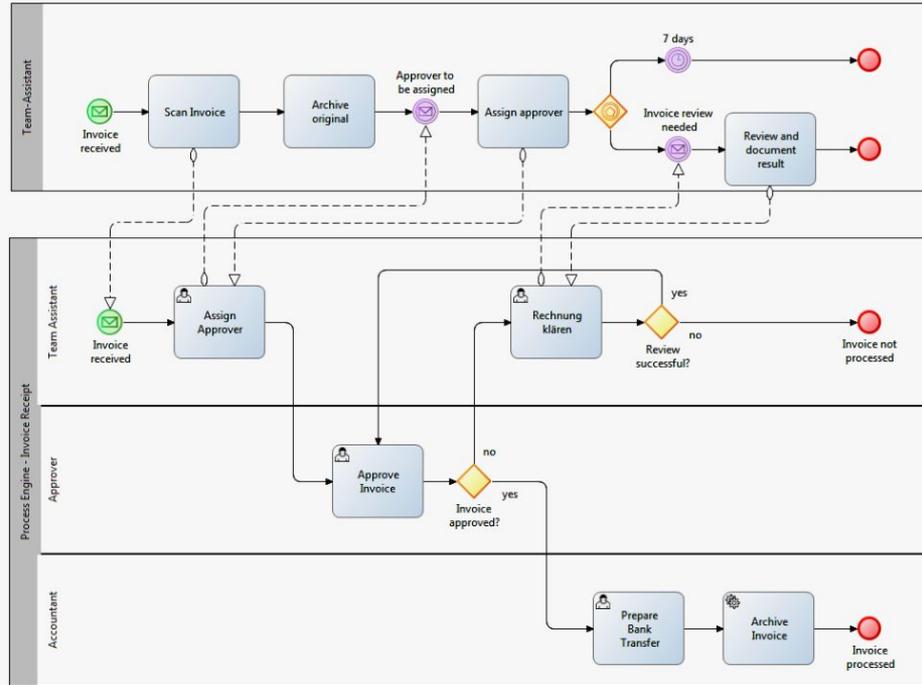


# BPMN Model Interchange Working Group (BPMN MIWG): The First Live Demo

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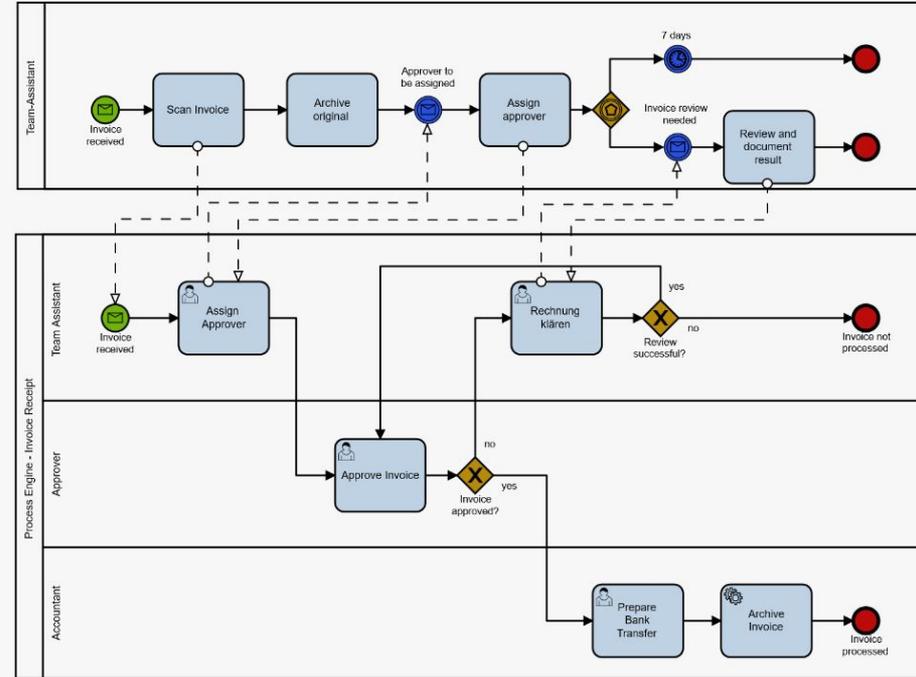


## C.1.0 reference



[Bounds Overlay](#) [BPMN file](#) [Reference folder](#)

## C.1.0 import



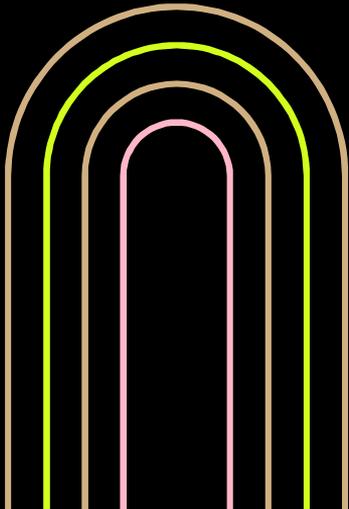
[Bounds Overlay](#) [Results folder](#)

# MIWG model interchange test results

Vendor	Tool	BPMN 2.0	Import	Export	Roundtrip	Demo Participation	Last Test Submission	A Results Submitted	B Results Submitted	C Results Submitted	Schema-valid
Camunda	<a href="#">bpmn.io (Camunda Modeler) 11.5.0</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013	2023	24/24	8/8	24/24	14/14
BOC Group	<a href="#">ADONIS 14.0</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013	2023	24/24	8/8	24/24	14/14
Software AG	<a href="#">ARIS 10.0.22</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2019, 2018	2023	24/24	8/8	24/24	14/14
Esteco S.p.A.	<a href="#">Cardanit (prev. BeePMN) 4.9.1</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2019, 2018, 2017, 2016	2023	16/24	0/8	24/24	6/10
Trisotech	<a href="#">Trisotech Workflow Modeler 10.15.3</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013	2022	24/24	8/8	24/24	14/14
MID GmbH	<a href="#">MID Innovator 15.1.1.11026</a>	+	+ Diff	+ Diff	+ Details	2022	2022	24/24	8/8	24/24	14/14
OMNINET	<a href="#">OMNITRACKER BPMN 12.3</a>	+	+ Diff	+ Diff	+ Details	2022, 2020	2022	24/24	8/8	24/24	14/14
viadee Unternehmensberatung AG	<a href="#">BPMN-Modeler for Confluence Enterprise 3.19.0</a>	+	+ Diff	+ Diff	+ Details	2022, 2020	2022	22/24	8/8	24/24	14/14
MID GmbH	<a href="#">MID bpanda 2019.05.0.8393</a>	+	+ Diff	+ Diff	+ Details	2022	2019	24/24	8/8	16/24	11/11
KnowProcess Limited	<a href="#">KnowProcess 3.0.0-beta-1</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013	2018	4/24	2/8	3/24	0/0
Signavio GmbH	<a href="#">Signavio Process Editor 10.0.0</a>	+	+ Diff	+ Diff	+ Details	2022, 2020, 2018, 2017, 2016, 2015, 2014, 2013	2016	24/24	8/8	16/24	11/13

# Open Standards enable...

- **Interoperability** via standard file format
- Switching of tools or tool versions gets easier
- Little or no vendor lock-in



# DMN: Decision Model and Notation

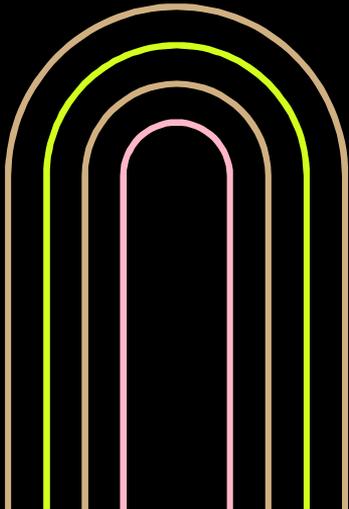
## FEEL: Friendly-Enough Expression Language



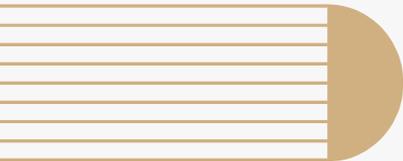
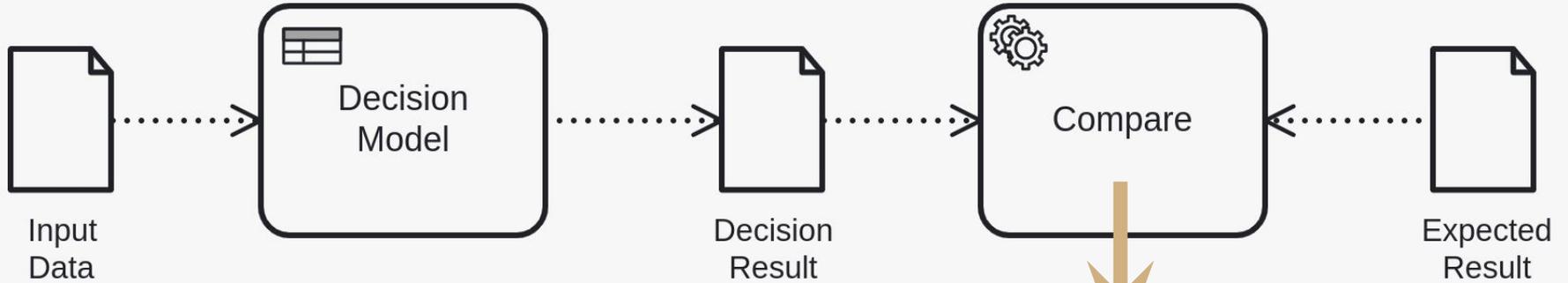
Input Data

# Open Standards enable...

- **Better language** than any single vendor could build on their own
- Standardization forces vendors to find a common denominator
- Different angles/perspectives are aligned with each other



# DMN Technology Compatibility Kit (TCK)





# DMN Technology Compatibility Kit (TCK)

- 1700 Test Cases
- 120 DMN Models
- Helps Vendors become compliant
- 8 Vendors **demonstrate** their compliance
- Also reveals issues with the spec, which are then reported to the RTF

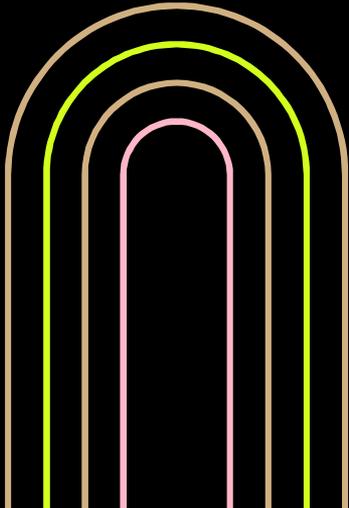
<https://dmn-tck.github.io/tck/>

**Submit your models to the DMN TCK!**

DMN Technology Compatibility Kit		
Submitters	Glossary	Tests
Home		
	Camunda	Camunda BPM 7.9.0
	Fujitsu America	Digital Transformation Platform (DXP) 2.4
	Goldman Sachs, I...	jDMN 3.0.0
	OpenRules, Inc.	OpenRules 7.0.0
	Oracle	Oracle Process Cloud 17.3.3
	Red Hat	Drools 7.25.0.Final
	Trisotech	Trisotech DMN Modeler 6.2.7

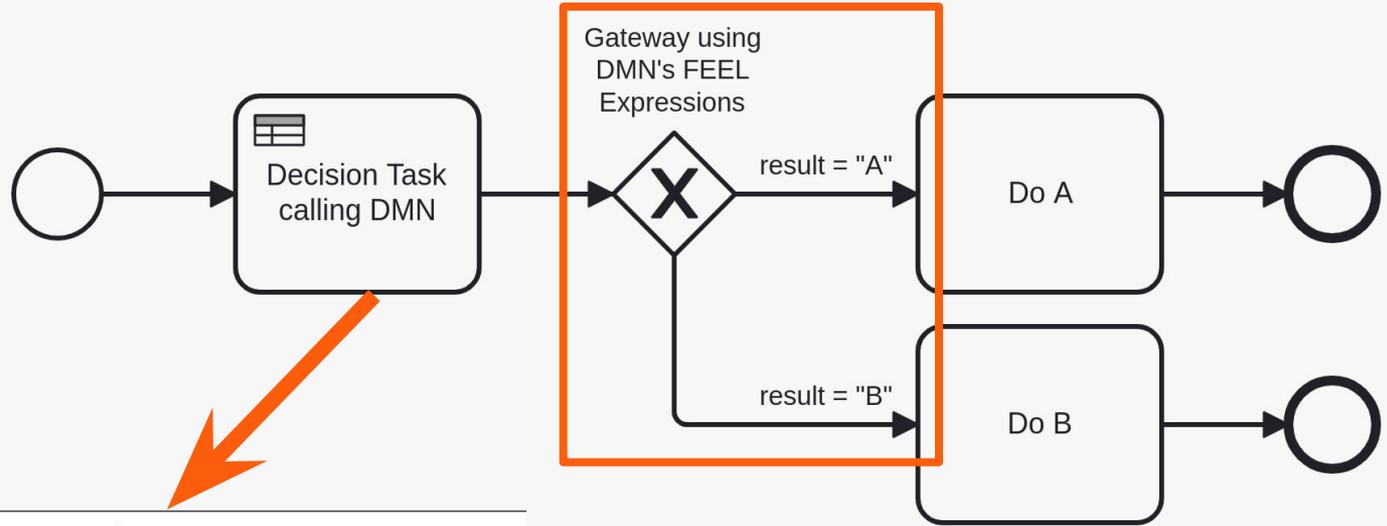
# Open Standards enable...

- Free and Open Source implementations of modeling and execution tools
- Barriers reduced for building Open Source because, e.g. Specification is freely available



**What is there to come?**

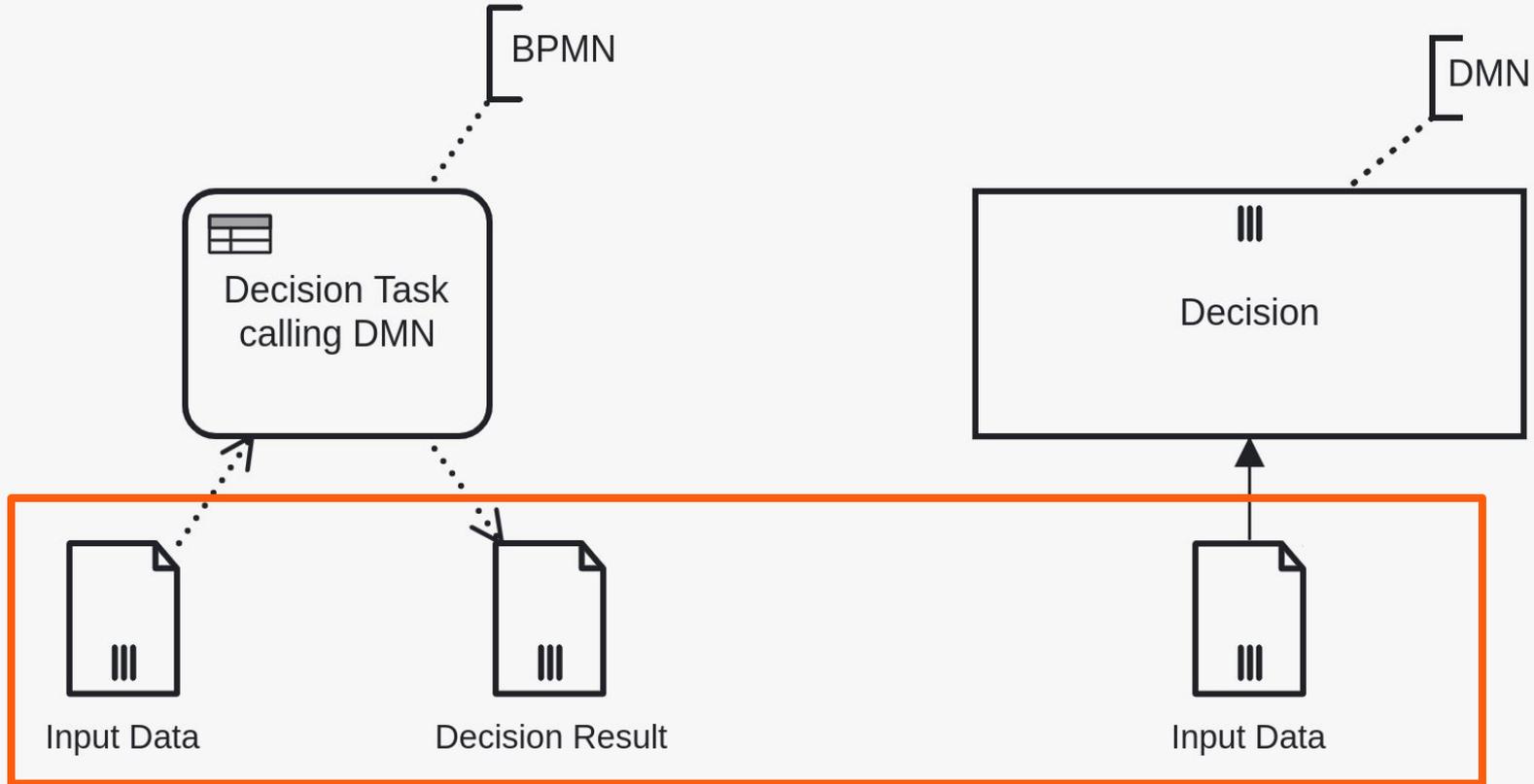
# BHMN: BPM+ Harmonization Model & Notation



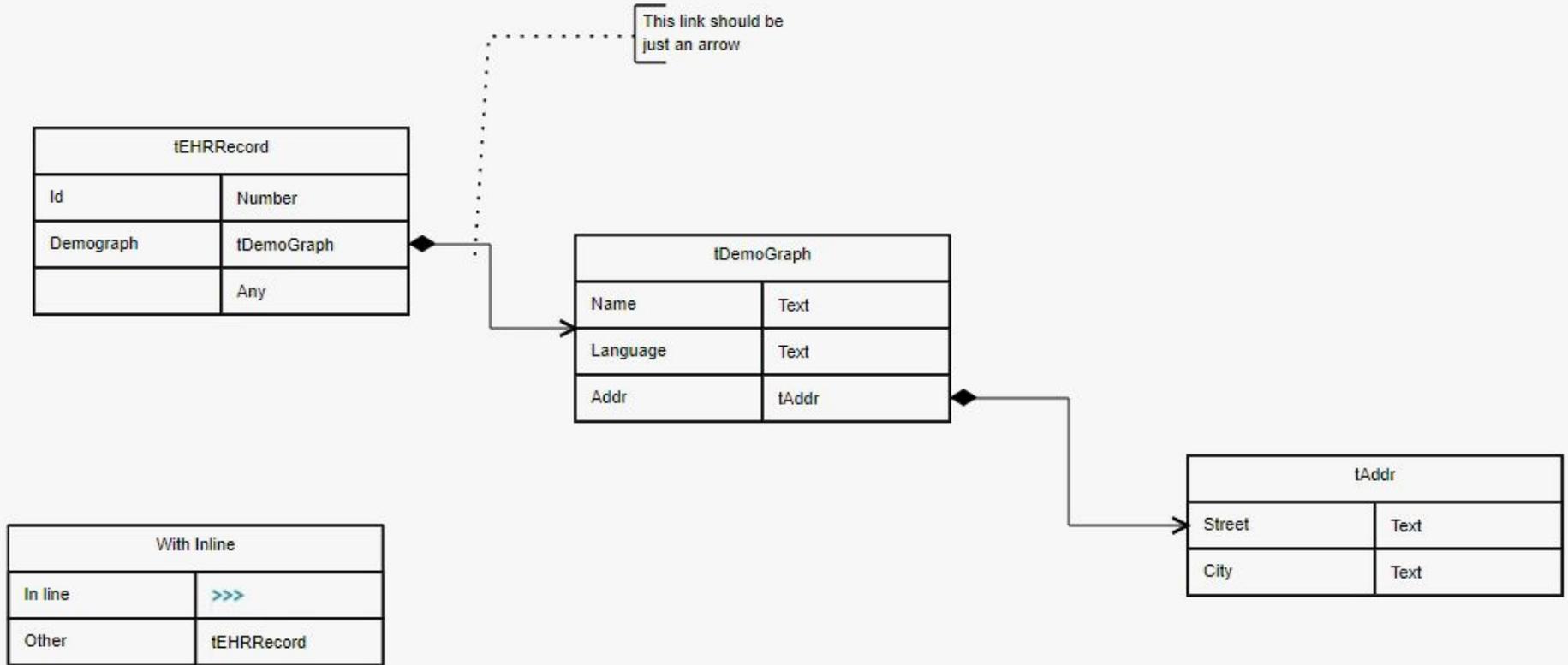
Order Discount | Hit Policy: Unique

	When	Then
	Order Amount long	Discount integer
1	<500	0
2	[500..999]	2
3	[1000..1999]	3
4	[2000..4999]	5
5	>=5000	8

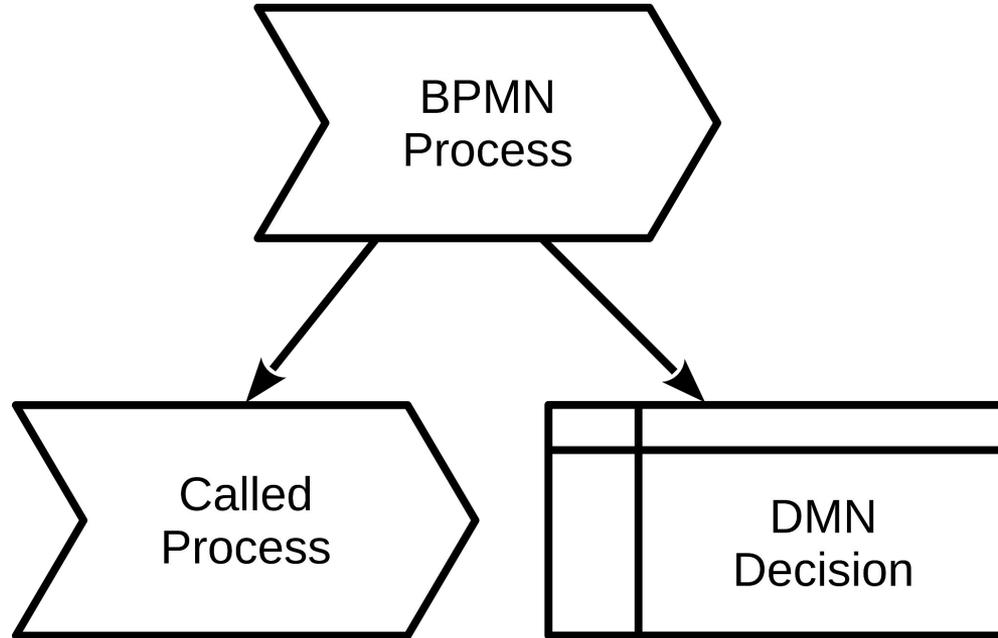
# SDMN: Shared Data Model and Notation



# SDMN: Shared Data Model and Notation



# KPMN: Knowledge Package Model & Notation



# Key Takeaways



Common knowledge with books, trainings & university courses that survives across tools, projects, and even when changing jobs

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Better languages due to collaboration of different vendors, scientists & enthusiasts

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Interoperability among tools reduces vendor lock-in and allows combination of tools

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Free and Open Source implementations

# Resources



## Camunda Academy

<https://academy.camunda.com>

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## Camunda 8 - Get Started (Web Modeler)

<https://camunda.com/get-started>

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## Camunda forums

<https://forum.camunda.io>

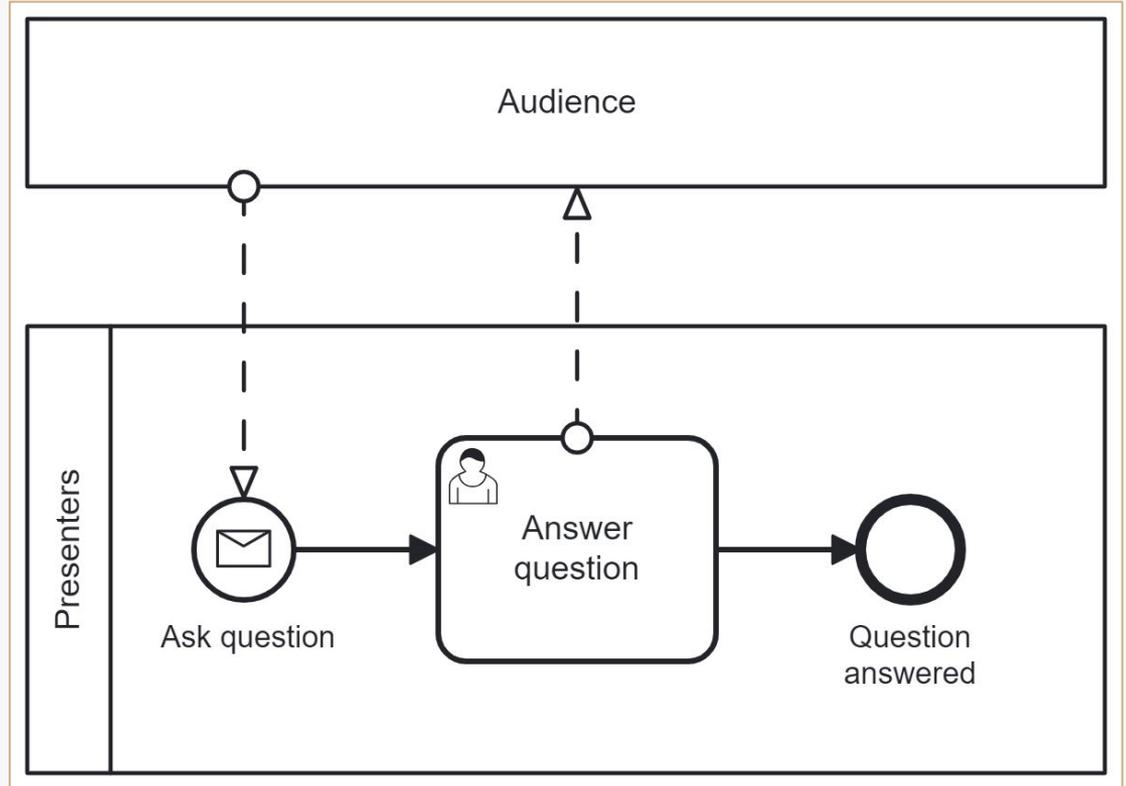
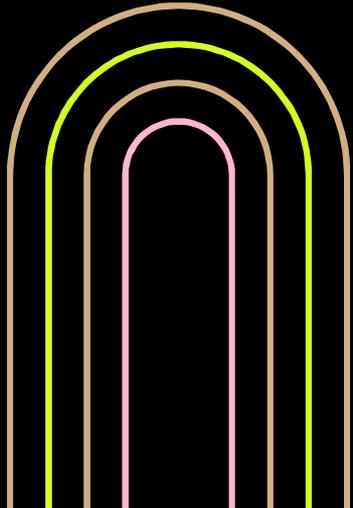
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## Camunda Educational License Program (CELP)

<https://camunda.com/educationee>

# Q&A



**Thank you!**

