CAMUNDA CON LIVE

Scaling Process Automation with a Modular Open Source Platform

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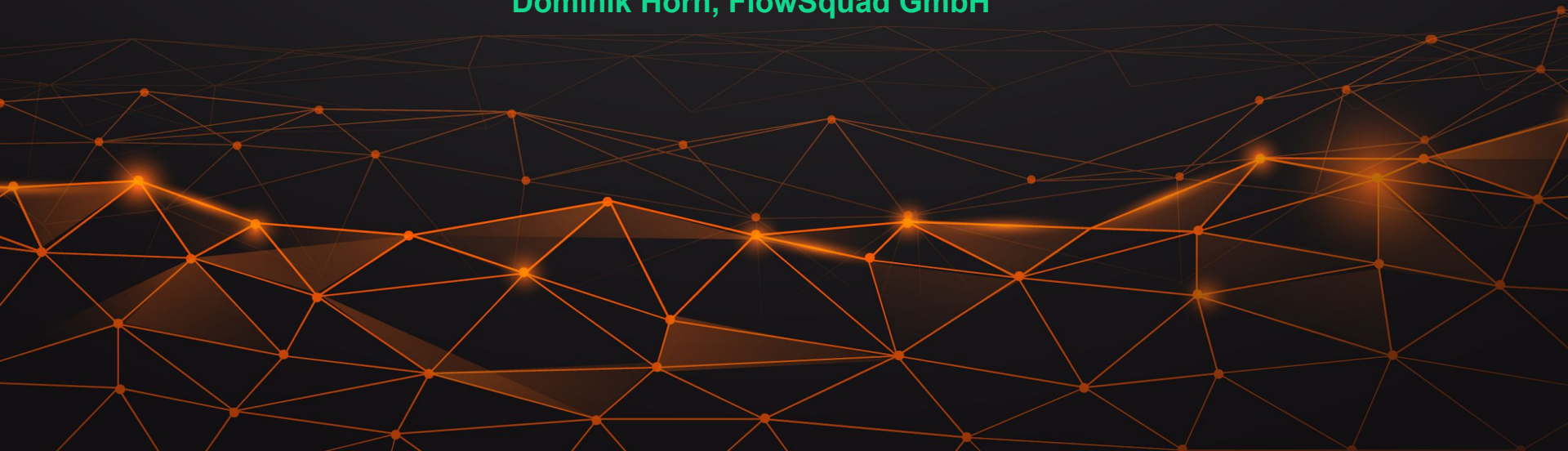

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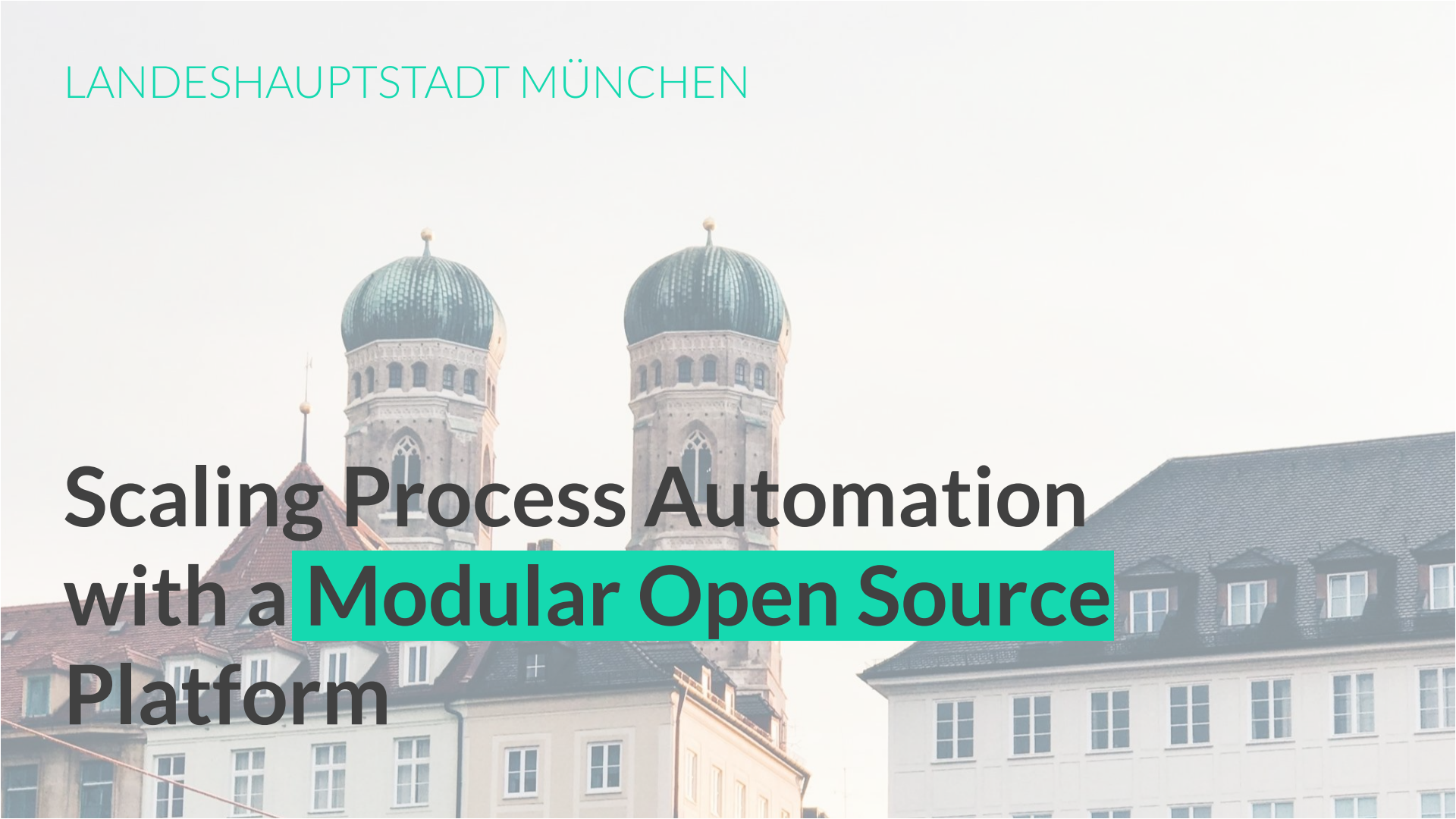


Scaling Process Automation with a Modular Open Source Platform

Wherever technically and financially possible, the city relies on open standards and free open source-licensed software, thus avoiding predictable vendor lock-in.

Coalition agreement - City of Munich
https://github.com/missgreenwood/foss-concept

Agenda

1. **Challenges & Architecture**
   How we build software ourselves
1. **Process Automation Roadmap**
   What we have done so far and what we plan to do
1. **Development Platform**
   How we want to scale process development

How we build software ourselves

Challenges & Architecture

Problem

more than 1 million face 2 face citizen contacts per year

Challenges & Architecture

Challenge

How can we bring our services to the customer in a digital manner?

Diversity vs. high demand challenge

Challenges & Architecture

Software Support for Business Services

20% MAKE (custom development), 80% BUY (out of the shelf products)

There’re still services with no software tooling at all.

Challenges & Architecture

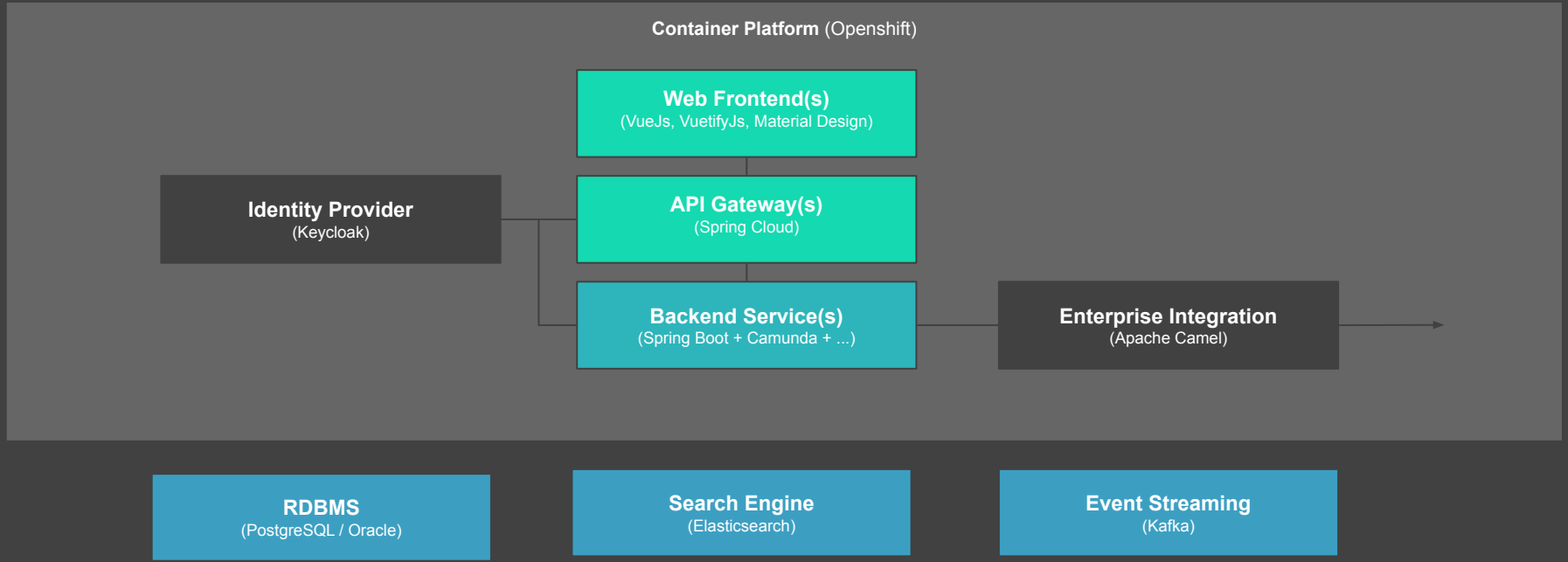
Software Development

How we develop software

- start on well maintained Maven artifacts
- use our Reference Architecture
- use the same Frameworks
- use our standard deployment development environment
- use our standard infrastructure services
- have a good development team
- have fun :)

Challenges & Architecture

Reference Architecture

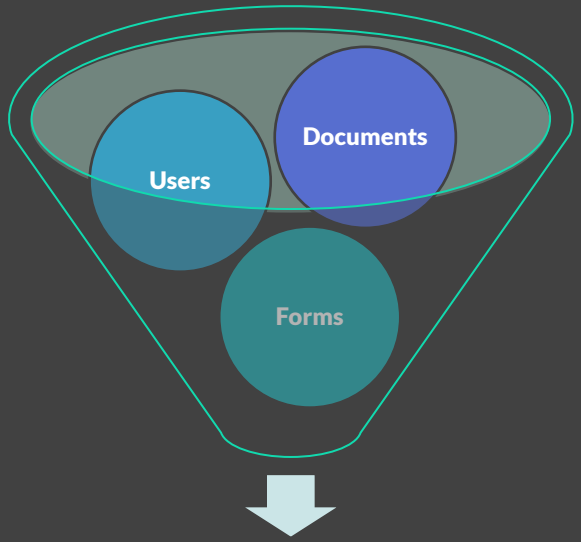


How we use Camunda

Past & Future

How we use Camunda Platform

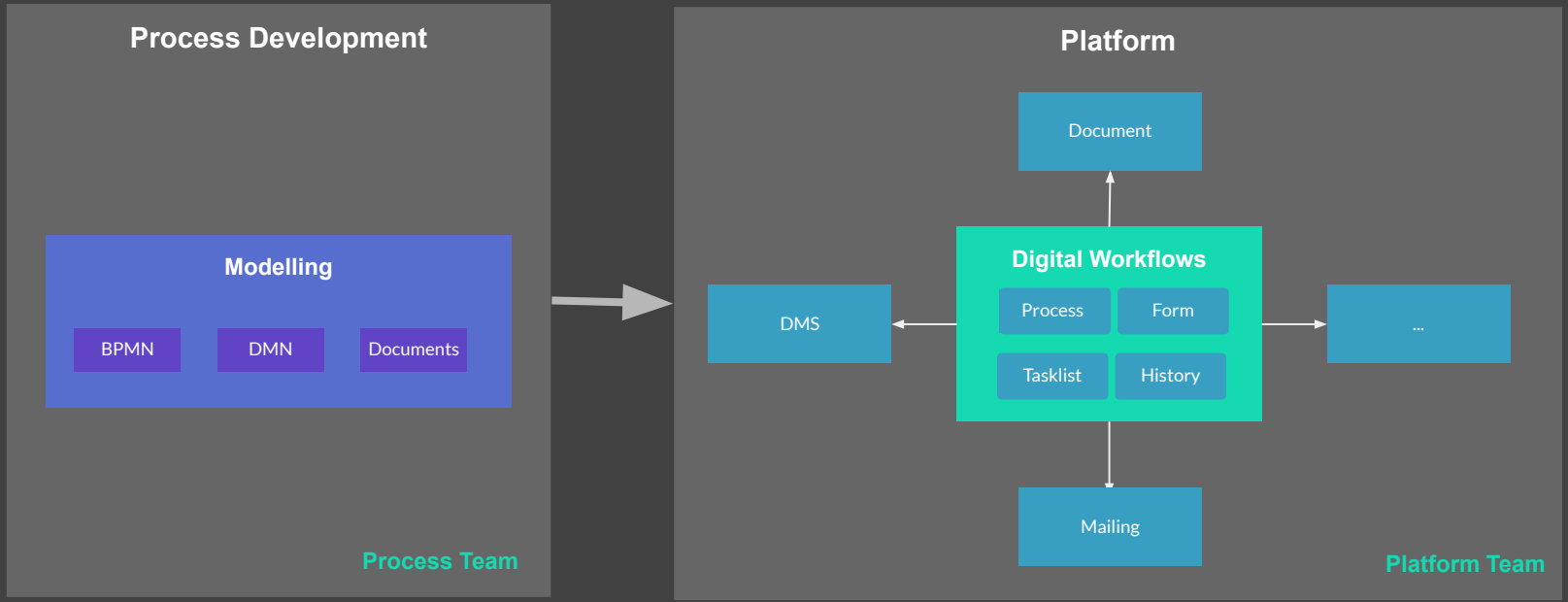
Initial Requirements



- Replace a system for interactive PDFs
- Gain workflow orchestration functionality
- Provide low-code functionality
- Rely on standards the organization itself can manage

How we use Camunda Platform

Initial Version



How we use Camunda Platform

Challenges

Starting with the platform

How we use Camunda Platform

Challenges

Starting with the platform

Low-Code Modeling

How we use Camunda Platform

Challenges

Starting with the platform

Low-Code Modeling

Handling Config & Forms

How we use Camunda Platform

Challenges

Starting with the platform

Low-Code Modeling

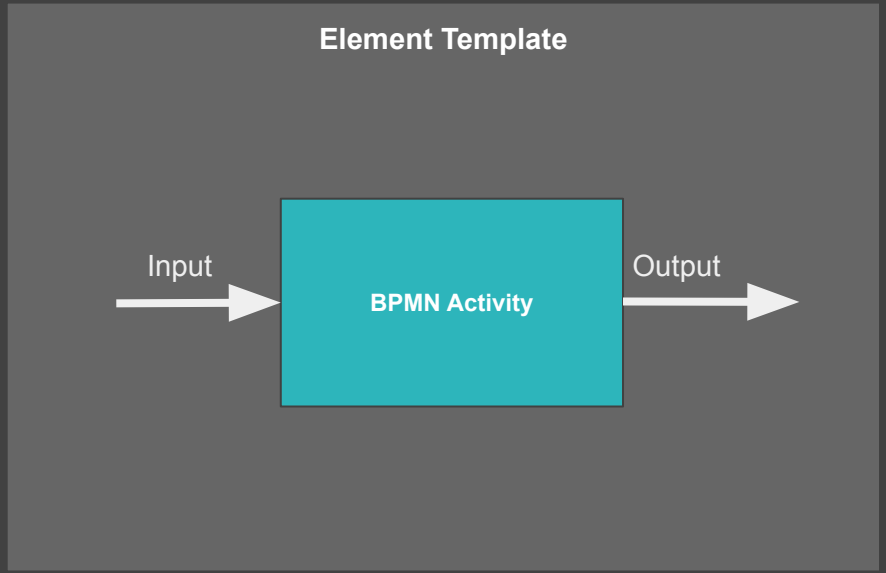
Handling Config & Forms

Connecting further systems

How we use Camunda Platform

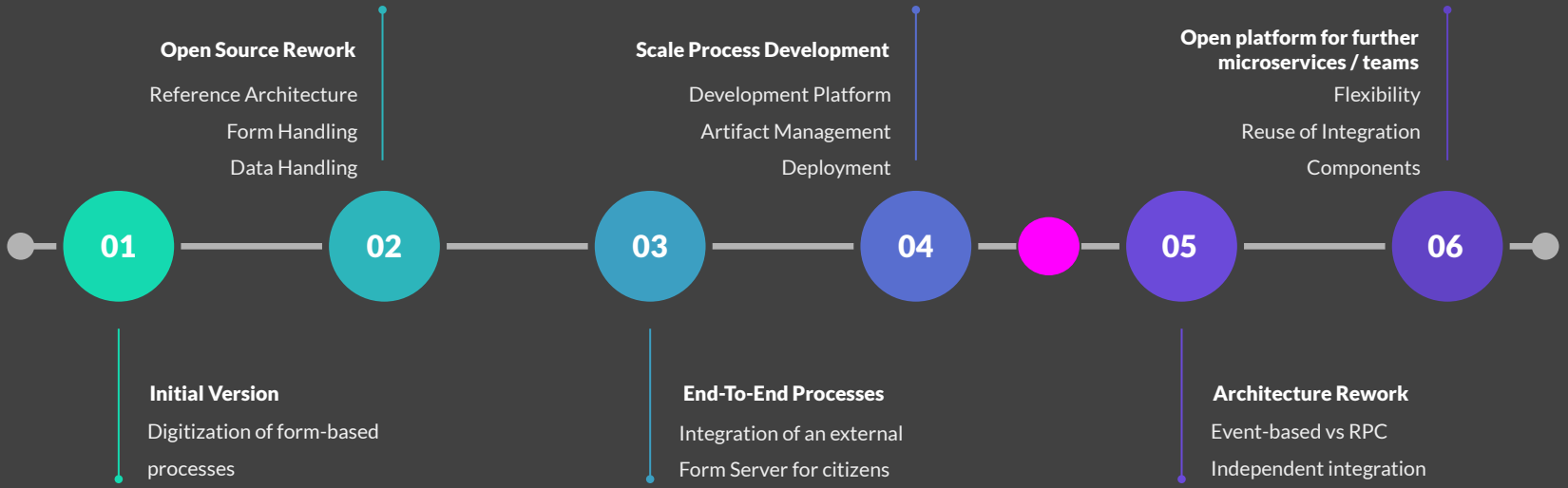
Reusability

- Specify input and output
- Access local variables only
- Restrict Properties Panel
- Provide example usages
- Use open standards for reusability



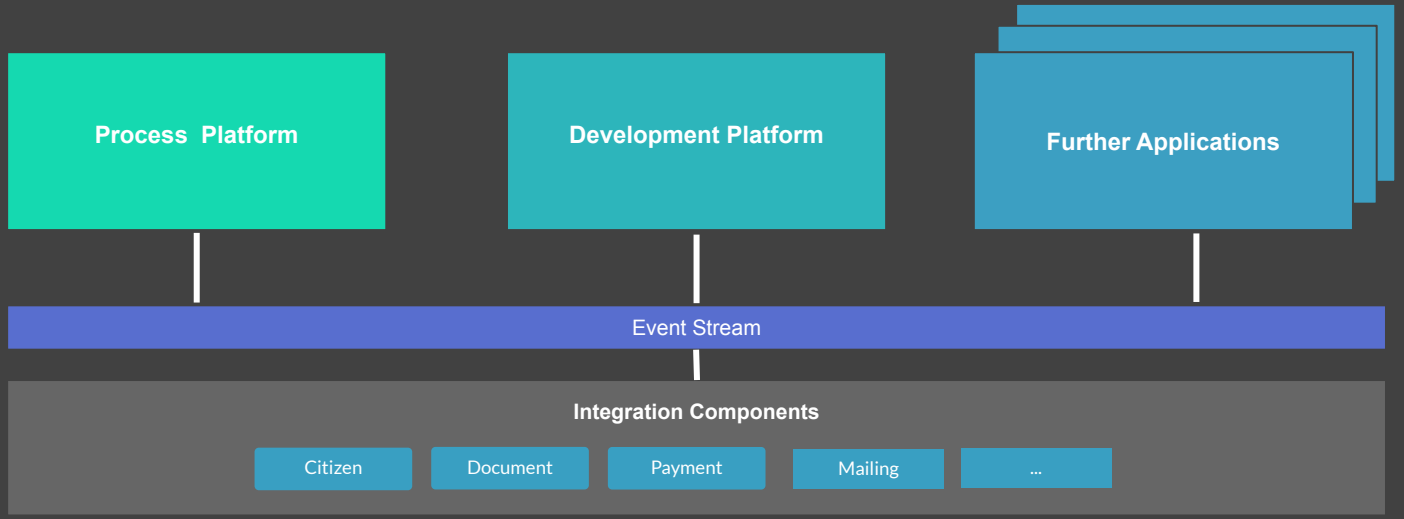
How we use Camunda Platform

Roadmap



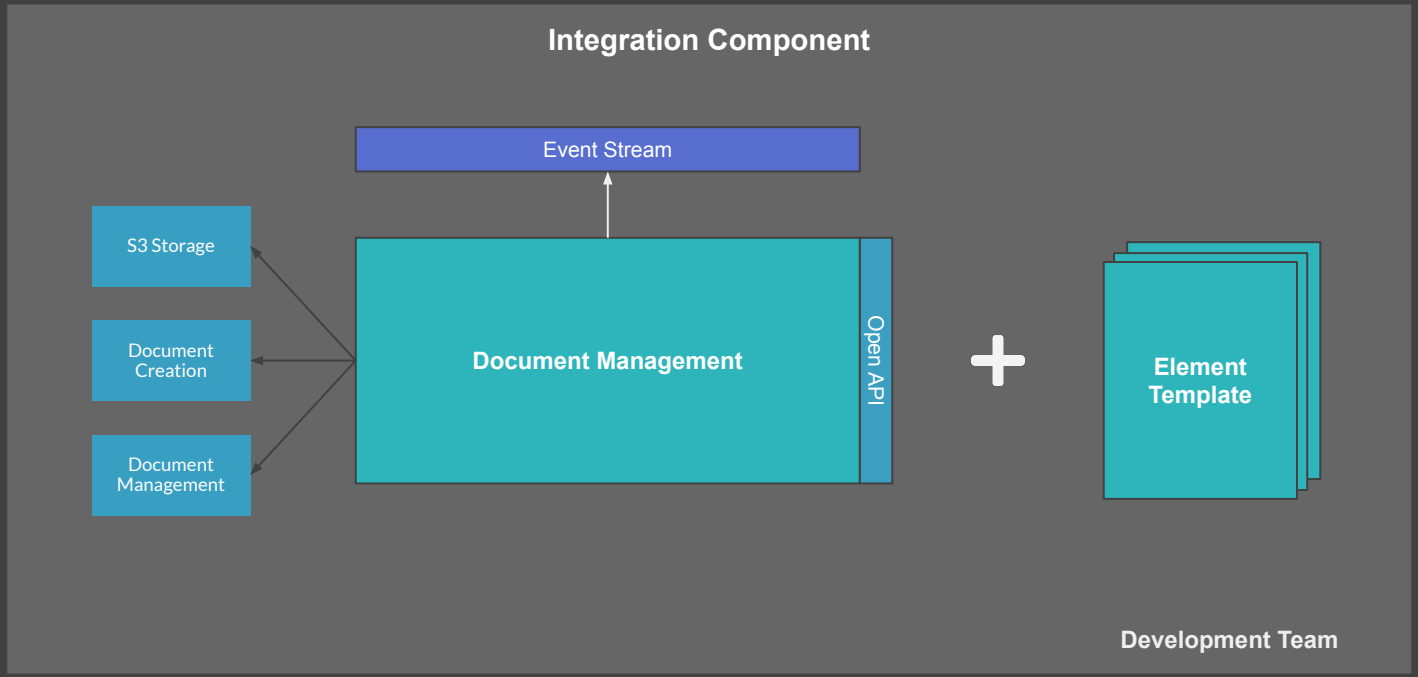
How we use Camunda Platform

Future Architecture



How we use Camunda Platform

Architecture of an Integration Component



How we want to scale process development

Scale Process Development

Current State

Form

Creation of forms

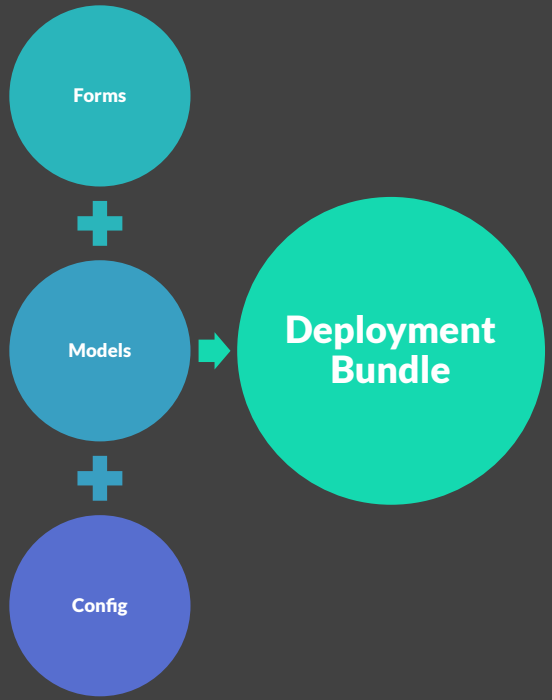
Creation of Validation rules

Models

BPMN + DMN

Configuration

Configuration properties used in the process model



Procedure:

- Iteratively create and test deployment bundles together with business experts
- Organizational deployment of the individual artifacts at a specific point in time

Scale Process Development

Challenges

STATUS QUO

Using Camunda Modeler locally

Manual integration between the different tools and artifacts

Simple JSON Form Builder

Deployment organized and executed by platform team

Scale Process Development

Challenges

STATUS QUO

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CHALLENGES

- Distribution of the desktop application
- Distribute and update element templates
- Organization of various deployments by the platform team
- Complex collaboration and synchronization of artifacts
- No integration between various modelling tools

At LHM we mainly have a diversity problem, many different processes, many systems, but so far no high throughput.

Scale Process Development

Architecture

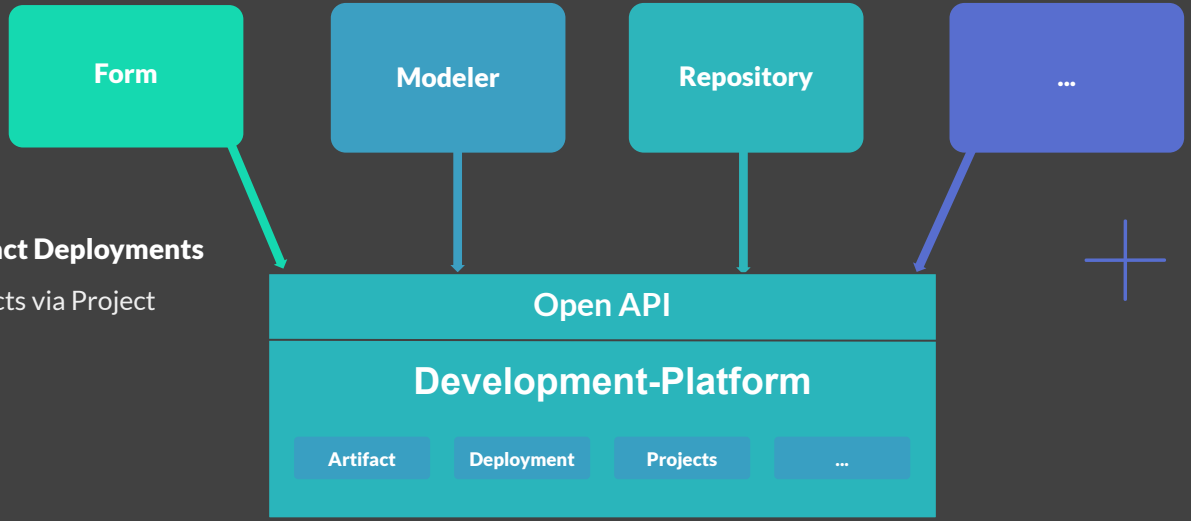
Artifact Integration

Make modeling more comfortable

Collaboration

Artifact Management

Deployment



Organize Artifact Deployments

Deploy all artifacts via Project Bundles

Additional Applications

Add new artifact types and modelling tools easily

DEMO

Scale Process Development

Improve Modelling Tools

Modeller

- INTEGRATION OF FORMS
- INTEGRATION OF CONFIGURATIONS
- INTEGRATION OF ELEMENT TEMPLATES
- EXECUTABLE CHECKS
- BPMN.IO PLUGINS

Forms

- APPLY JSON SCHEMAS FOR FRONTEND RENDERING
- USE FOR BACKEND VALIDATION
- EXTRACT INFORMATION FOR PROJECT DOCUMENTATION
- EXTEND WITH CUSTOM FORM COMPONENTS

Scale Process Development

Open Source

Public Money
Public Code

THANK YOU