

Camunda Community Summit 2023

Day 2
Daniel Meyer, Bernd Ruecker,
and Mo Ladha

**CAMUNDA
COMMUNITY
SUMMIT 2023**

December 2022

1.

A punishing winter storm that dumped multiple feet of snow across much of America led to widespread flight cancellations over the Christmas holiday.

By Monday, air travel was more or less back to normal – unless you booked your holiday travel with Southwest Airlines.

2.

More than 90% of Wednesday's US flight cancellations were Southwest flights, according to flight tracking website FlightAware.

Southwest canceled more than 2,500 flights. The next highest: SkyWest, with 77.

3.

Southwest warned that it would continue canceling flights until it could get its operations back on track. The company's CEO said this has been the biggest disruption he's seen in his career.

The Biden administration is investigating. 😬

Some analysis

“**The process** of matching up those crew members with the aircraft **could not be handled by our technology**”

“Southwest ended up with planes that were ready to take off with available crew, but **the company’s scheduling software wasn’t able to match them quickly and accurately**”

“As a result, we had to ask **our crew schedulers to do this manually**, and it’s extraordinarily difficult,” he said. “**That is a tedious, long process.**” 😞

Meanwhile ...



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News / Small business

3 min

December 29, 2022

Celebrating a record-breaking holiday season for Amazon, with customers purchasing more items than ever before from our selling partners

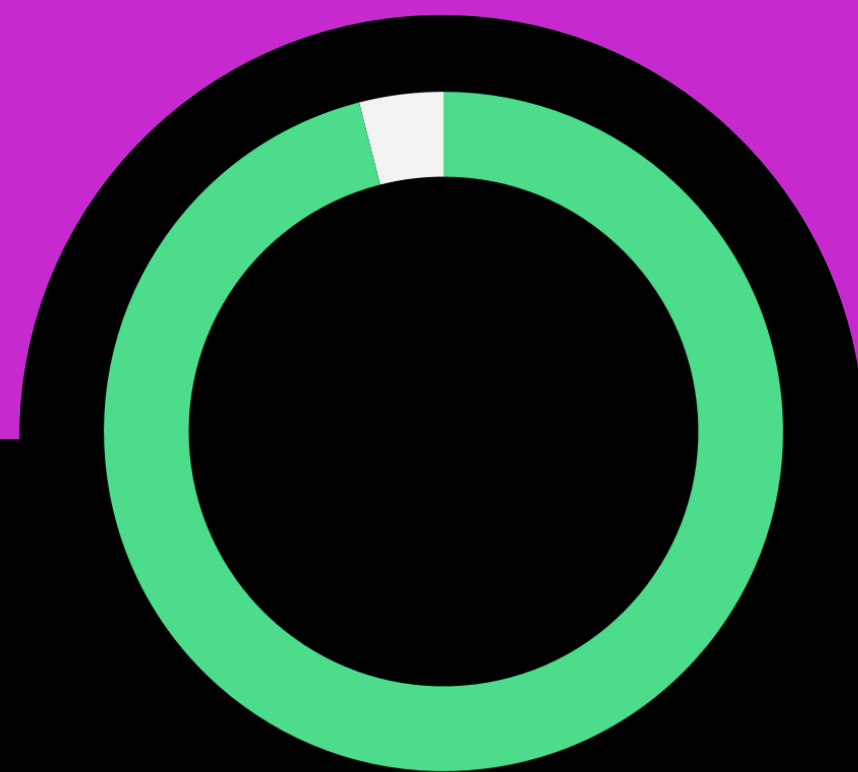
Written by Amazon Staff

How do you become the Amazon of your industry?



96% of decision makers agree:

Process Automation is the key to Digital Transformation.¹

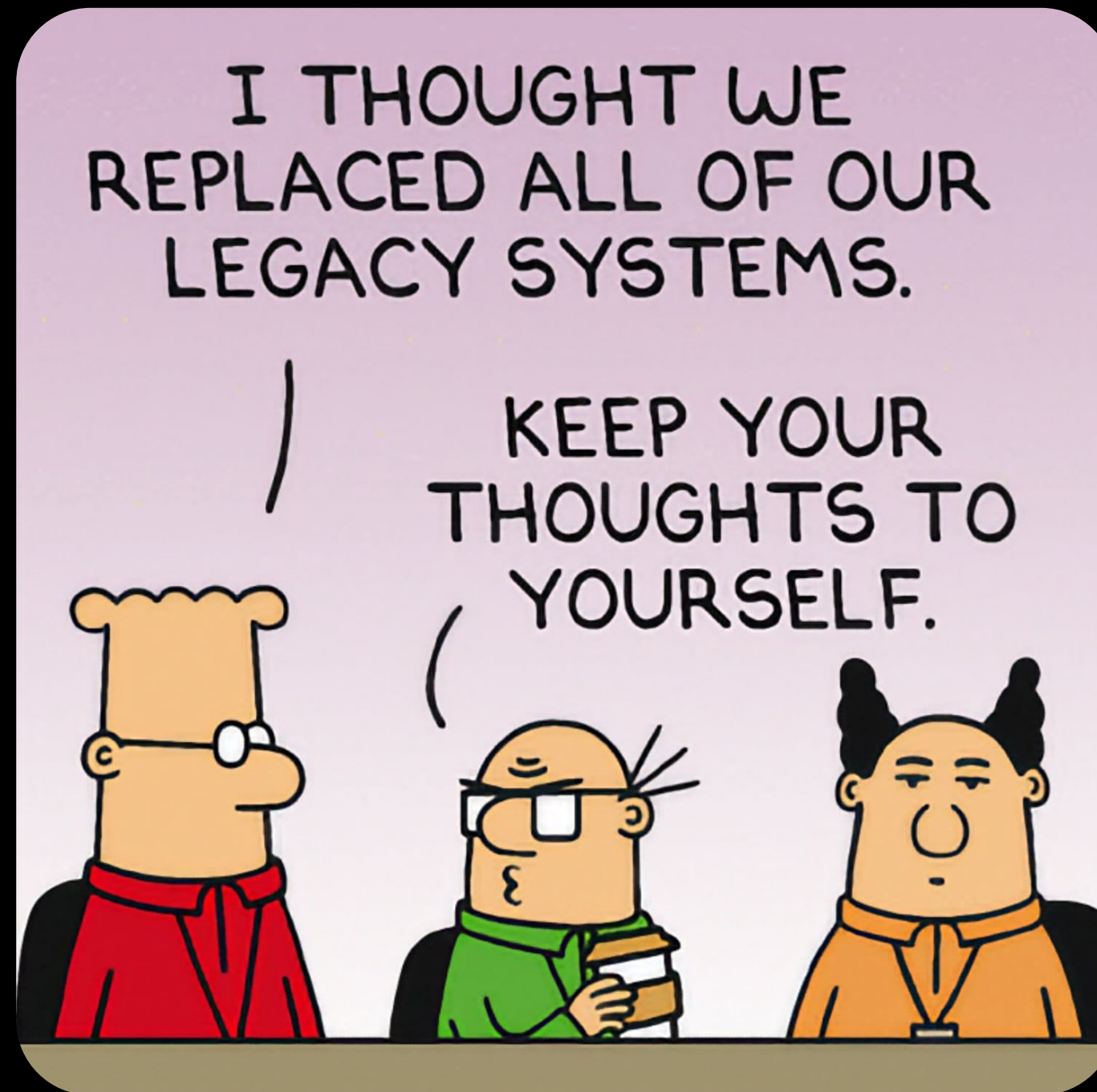


Source: 2023 State of Process Orchestration Report. n = 755 IT decision makers from the US, UK, Germany, and France.

¹ Question: To what extent do you agree or disagree with the following statement: "Process automation is a vital element of digital transformation"?

² Question: Which of the following components are included as part of a typical process automation implementation within your organization?

True transformation is hard

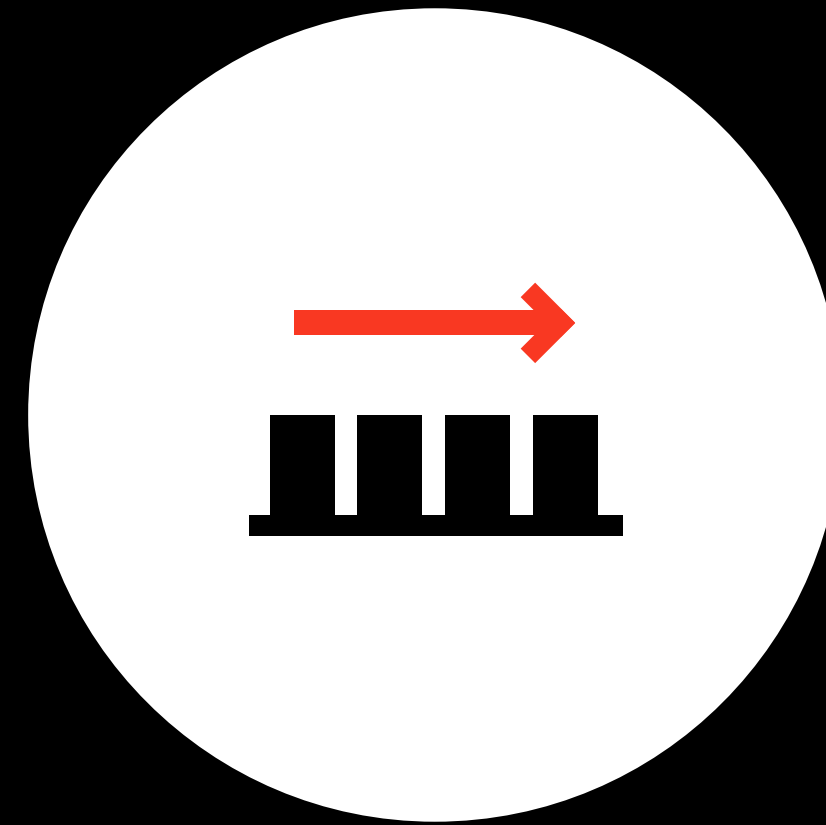


Legacy and Complexity



Aspiration

Amazon-levels of
automation **where processes**
run seamlessly



Reality

Dealing with complexity
and legacy is a
harsh reality

Camunda's Mission

Camunda enables organizations to orchestrate processes across people, systems, and devices to continuously overcome complexity and increase efficiency.

Camunda - The Universal Process Orchestrator

Orchestrate

Complex process flows across people, systems and devices.

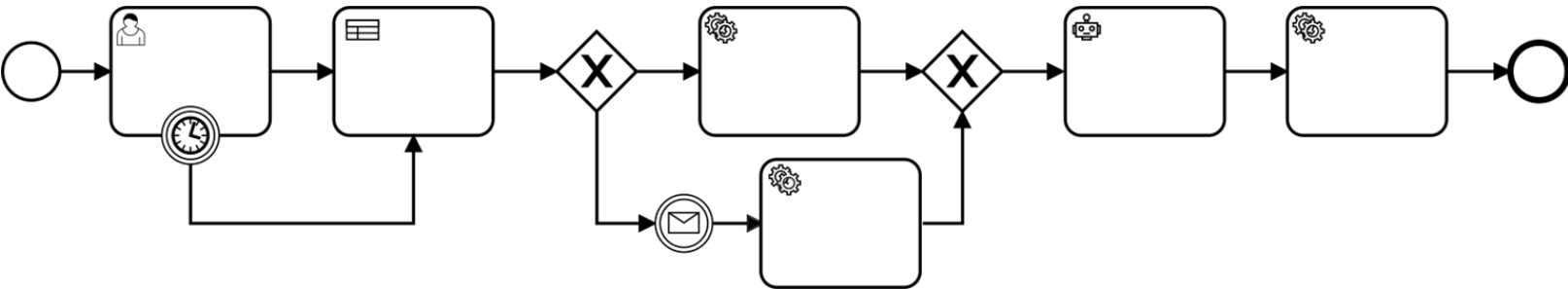
Automate

Any process, anywhere.

Transform

Your organization toward a digital future.

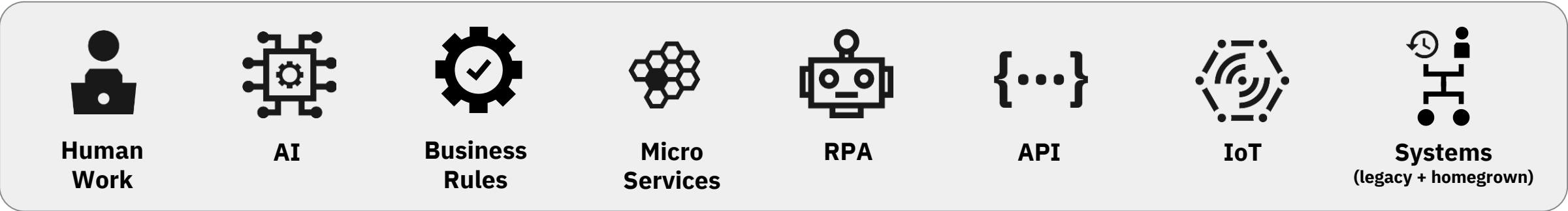
Collaborate



Flexibility



All Endpoints





MEANWHILE

Talent Shortage

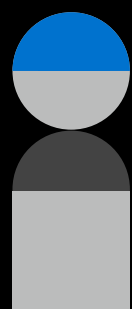


Yes, there are several sources that can provide evidence of the talent shortage of developers. Here are a few:

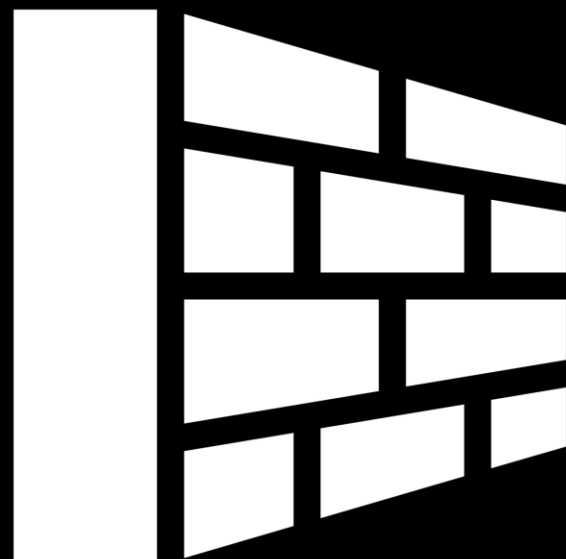
1. According to the 2021 Harvey Nash/KPMG CIO Survey, 67% of technology leaders reported skills shortages as a barrier to digital transformation. This survey involved more than 4,200 CIOs and technology leaders from 108 countries.
2. In a 2021 survey by Indeed, 80% of hiring managers and recruiters reported that they are having difficulty finding and hiring software development talent.
3. The 2021 State of Software Development report by Coding Sans found that 55% of developers surveyed reported difficulty finding and hiring talent.
4. A 2021 report by the Center for Cyber Safety and Education found that the global cybersecurity workforce gap has grown to 3.12 million, with 63% of organizations reporting a shortage of cybersecurity staff.

These sources, among others, provide evidence of the talent shortage of developers in various sectors and regions.

Business vs. IT?

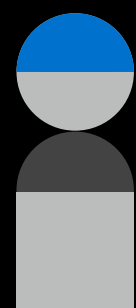


**Business
Person**

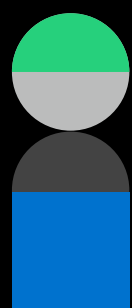


**Java
Developer**

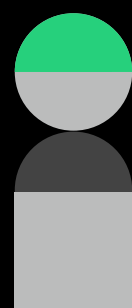
Diversity of roles



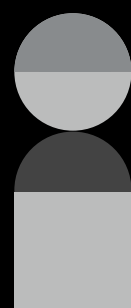
**Business
Person**



**Citizen
Developer**



**Consultant
or
Power User**



**Bot
Developer**



**Low-code
Developer**



**Junior
Developer**

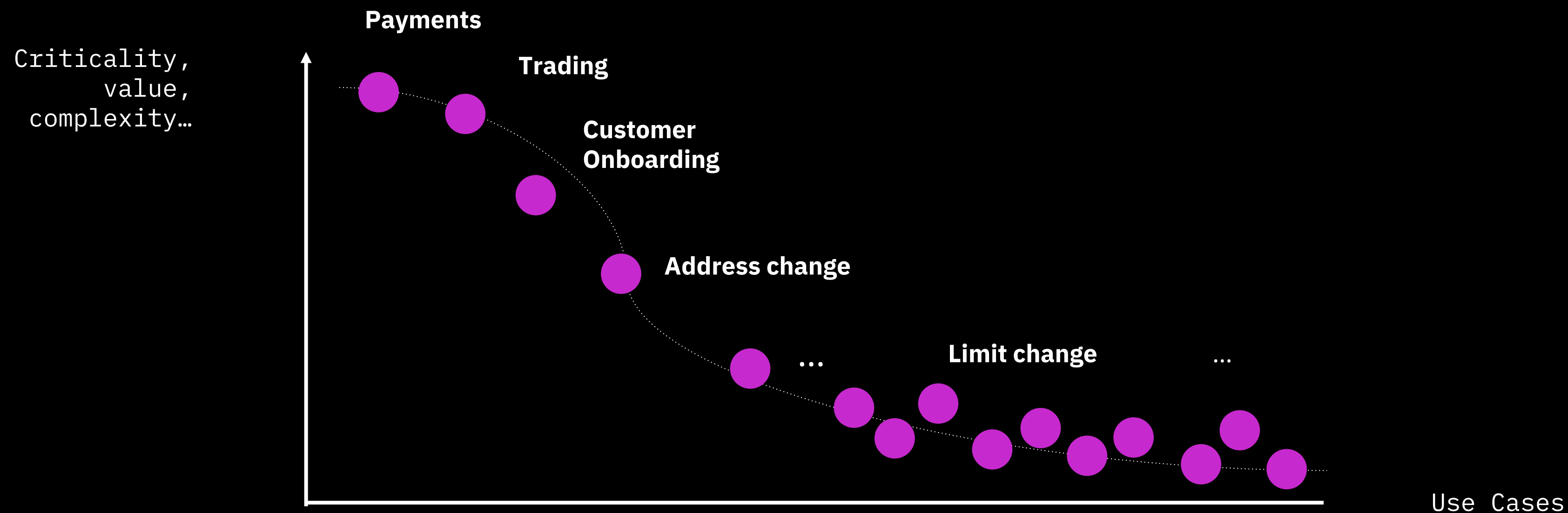


**Senior
Developer
or
Camunda
Co-founder**



**Principal
Developer**

Process != process



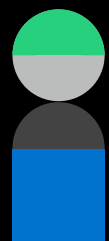
Categorize your use case



Green

Do it yourself

- simple
- local automations with little criticality
- no governance or quality assurance



Citizen
Developer



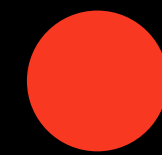
Yellow

Guided

- medium complexity
- medium criticality
- some governance required
- some guidance necessary



Anything in
between



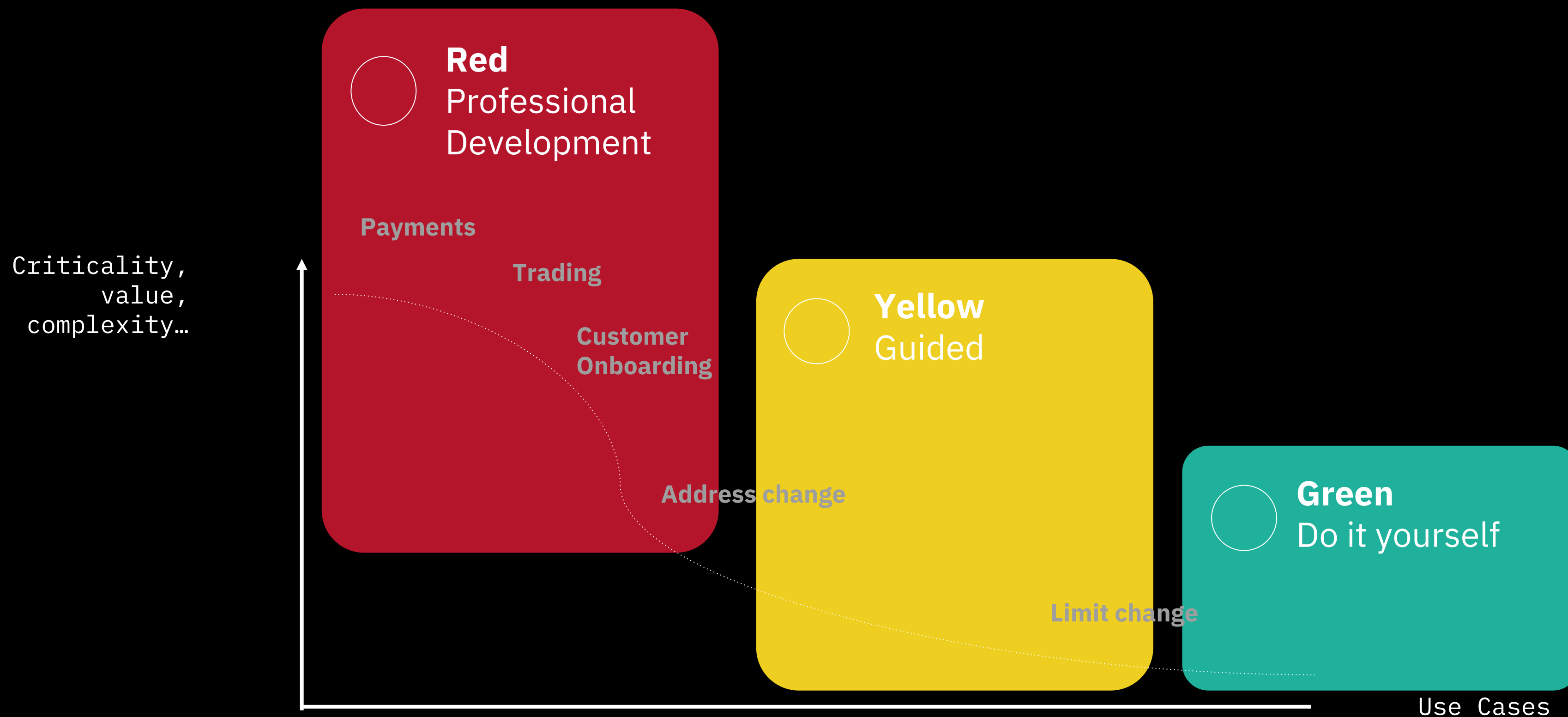
Red

Professional Development

- high complexity
- high criticality
- compliance and regulatory requirements
- version control
- automated testing
- CI / CD



Professional
Developer





Low-code?

Low-code as an accelerator



Dial-in low-code as much as you need

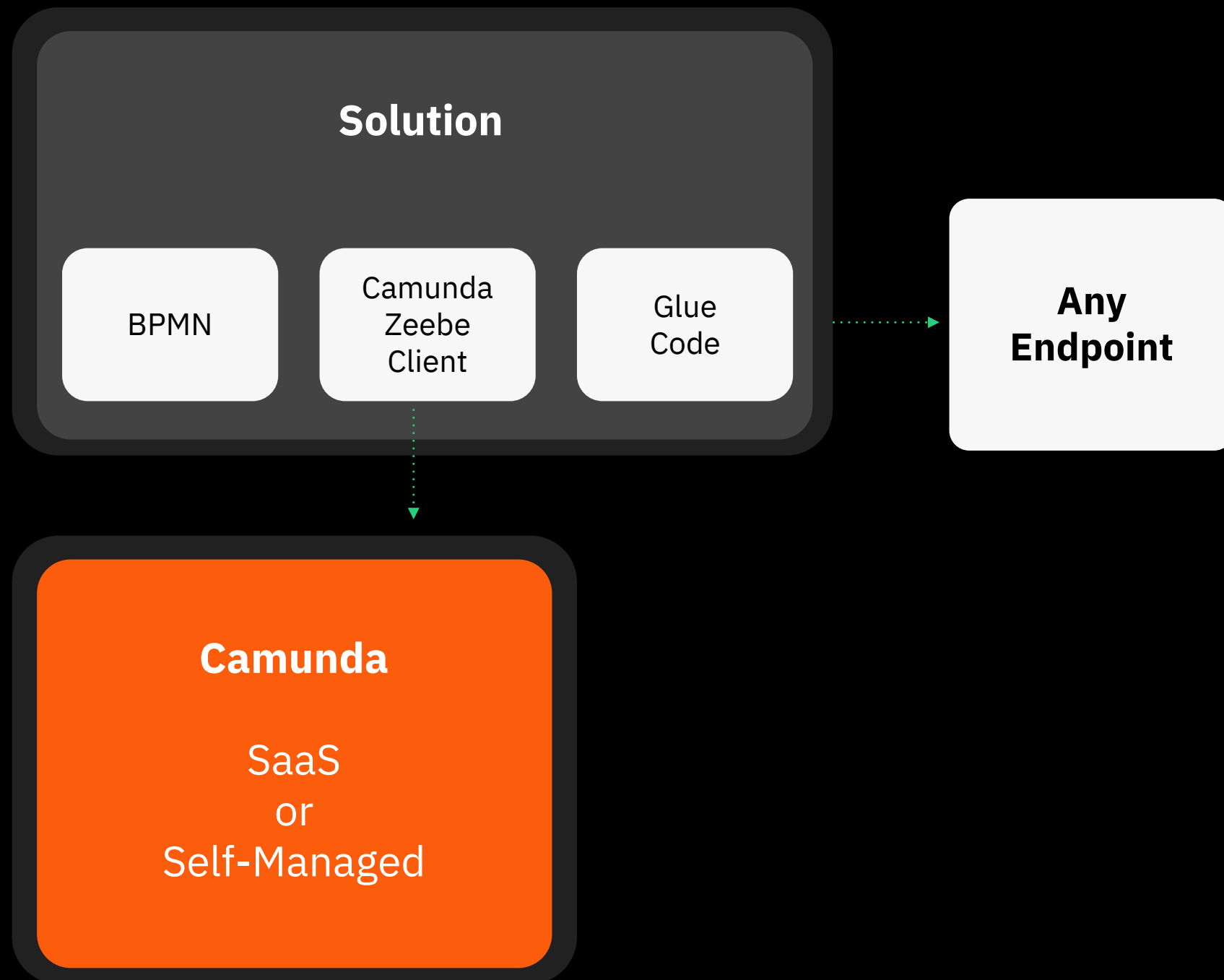
“Solution
Acceleration”

instead of

“Low code”



Solution architecture example



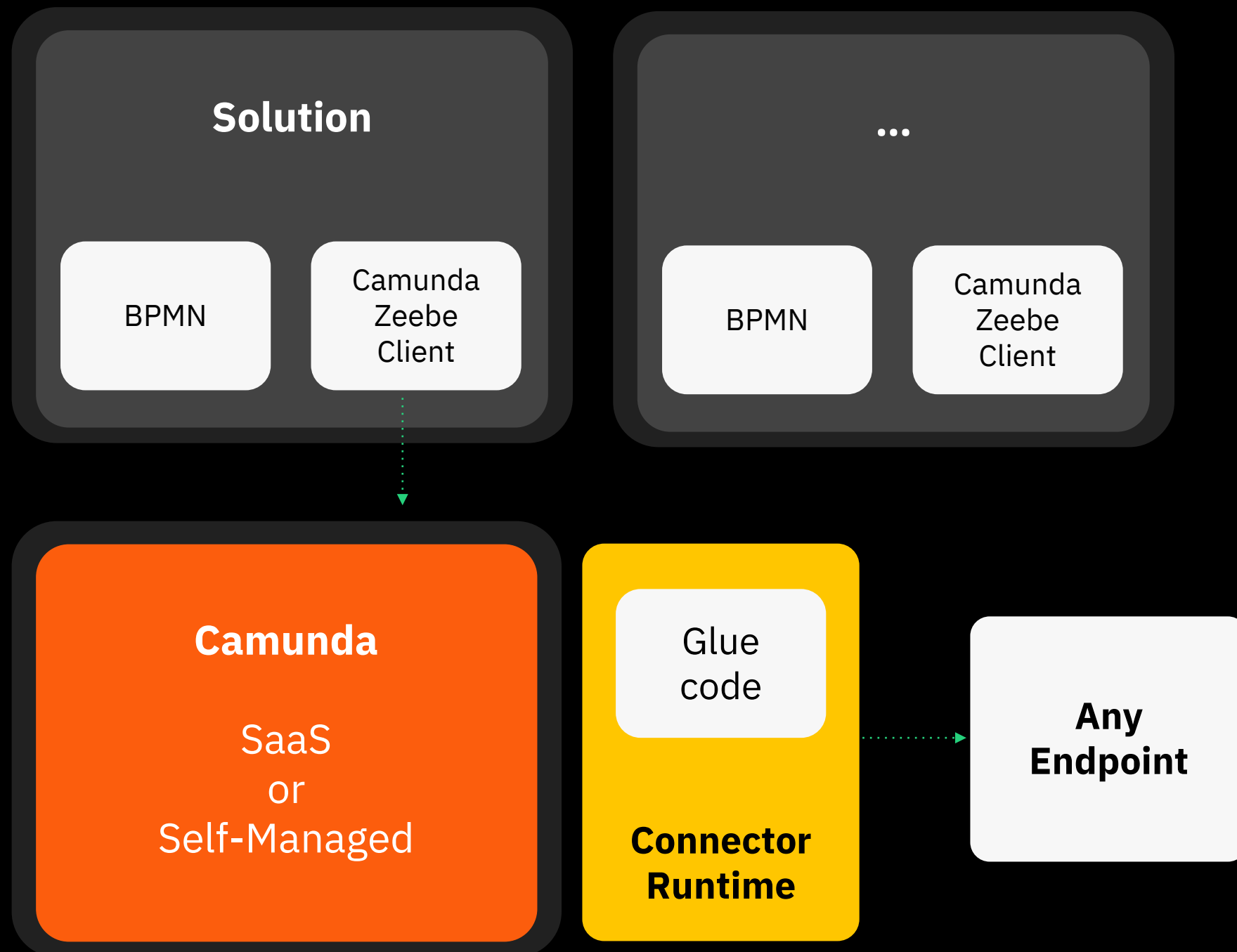
Supports any programming language

- Clients for Java, C#, NodeJS, Go, ... available
- Natively integrates into your stack

Runs anywhere

- Available as a SaaS service
- Manage it yourself (in your own cloud, your datacenter, your laptop)

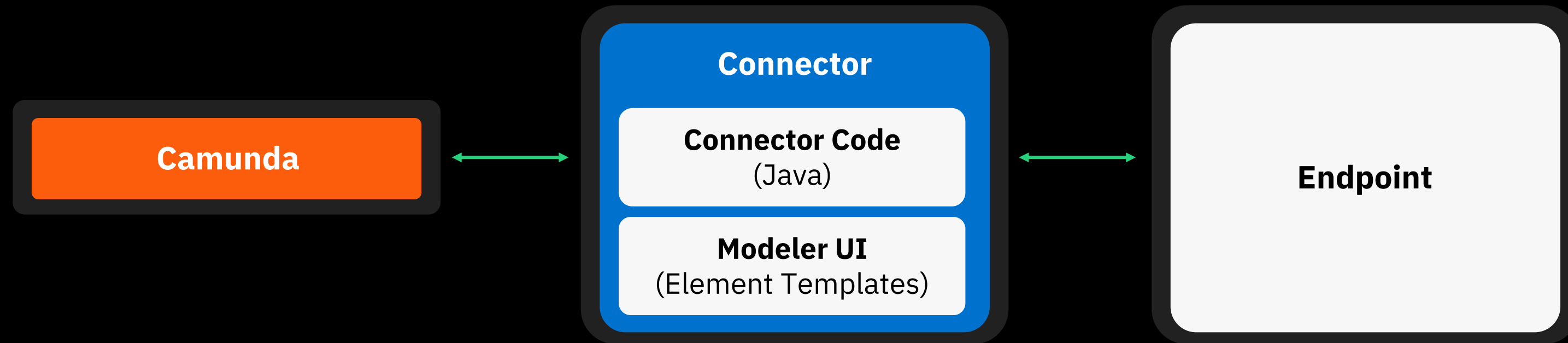
Solution architecture example with connector



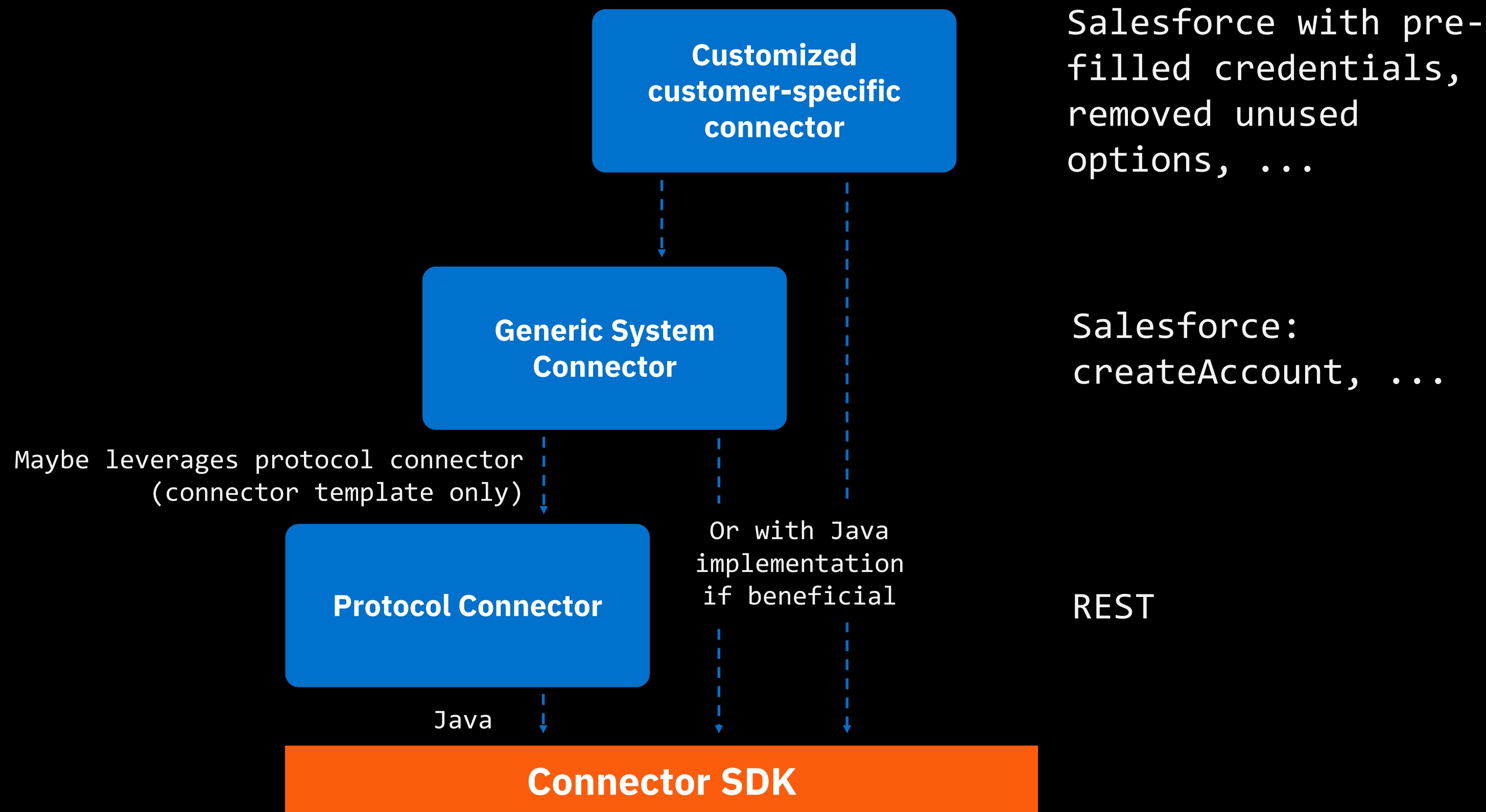
Runs anywhere

- Multiple connector runtime options, including SaaS, self-managed, co-located, and local installations

What is a Connector?



Different kind of Connectors



```
@Component
@OutboundConnector(
    name="TwitterConnector",
    type = "twitter",
    inputVariables = "tweetContent")
public class TwitterConnector implements OutboundConnectorFunction {

    @Override
    public Object execute(OutboundConnectorContext outboundConnectorContext) throws Exception {
        TwitterInput input = outboundConnectorContext.getVariablesAsType(TwitterInput.class);
        String content = input.getTweetContent();

        Twitter twitter = Twitter.getInstance();
        Status status = twitter.v1().tweets().updateStatus(content);

        return status.getId();
    }
}
```


Demo time...




```
{
  "$schema": "https://unpkg.com/@camunda/zeebe-element-templates-json-schema/resources/schema.json",
  "name": "Twilio Connector",
  "id": "io.camunda.connectors.Twilio.v1",
  "version": 1,
  "elementType": {
    "value": "bpmn:ServiceTask"
  },
  "properties": [
    {
      "type": "Hidden",
      "value": "io.camunda:http-json:1",
      "binding": {
        "type": "zeebe:taskDefinition:type"
      }
    }
  ],
}
```

```
{
  "label": "Operation type",
  "id": "operationType",
  "group": "operation",
  "type": "Dropdown",
  "optional": false,
  "choices": [
    {
      "name": "Send a SMS",
      "value": "sendSms"
    },
    {
      "name": "Get message",
      "value": "getMessage"
    },
    {
      "name": "List Messages",
      "value": "listMessages"
    }
  ],
  "binding": {
    "type": "zeebe:input",
    "name": "operationType"
  }
},
```

```
{
  "type": "Hidden",
  "value": "post",
  "binding": {
    "type": "zeebe:input",
    "name": "method"
  },
  "condition": {
    "property": "operationType",
    "equals": "sendSms"
  }
},
```

```
{
  "type": "Hidden",
  "value": "={\"content-type\": \"application/x-www-form-urlencoded\"}",
  "binding": {
    "type": "zeebe:input",
    "name": "headers"
  },
  "condition": {
    "property": "operationType",
    "equals": "sendSms"
  },
  "optional": false
},
```

Protocol > Generic > Specific Connectors

REST CONNECTOR
Make a request

General

Template **Applied**

Authentication

Type
None

Choose the authentication type. Select 'None' if no authentication is necessary

HTTP Endpoint

Method
GET

URL

Must not be empty.

Query Parameters

=

Map of query parameters to add to the request URL

HTTP Headers

=

Map of HTTP headers to add to the request

Connect Timeout

Connection Timeout
20

Java &
JSON

TWILIO
ServiceTask

General

Template

Operation

Operation type
Send a SMS
Get message
List Messages

Authentication type

Response Mapping

Result Variable

Name of variable to store the response in. Details in the [documentation](#)

Result Expression

=

Expression to map the response into process. Details in the [documentation](#)

Error Handling

Connection Timeout
20

Sets the timeout in seconds to establish for an infinite timeout

Error Expression

JSON

SEND SMS
ServiceTask

General

Template

Input

Message Text

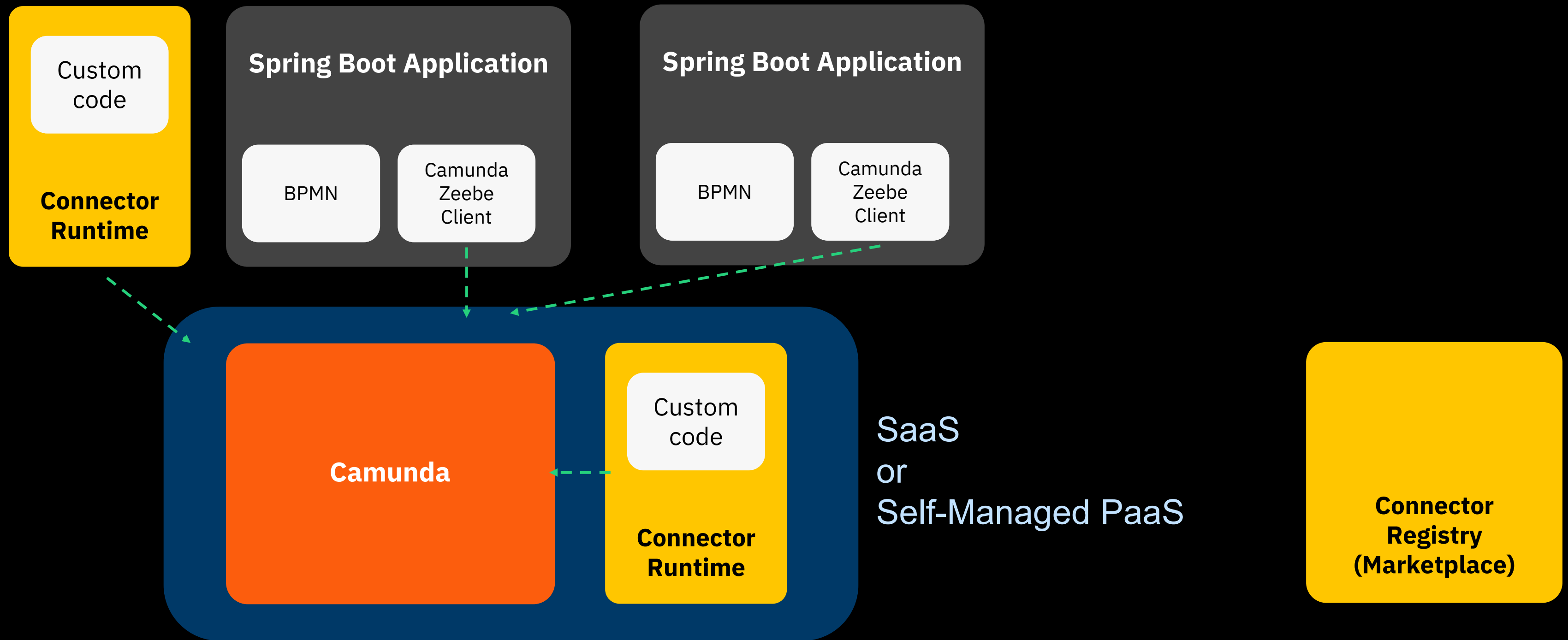
Must not be empty.
The content of the message that will be sent

To Number

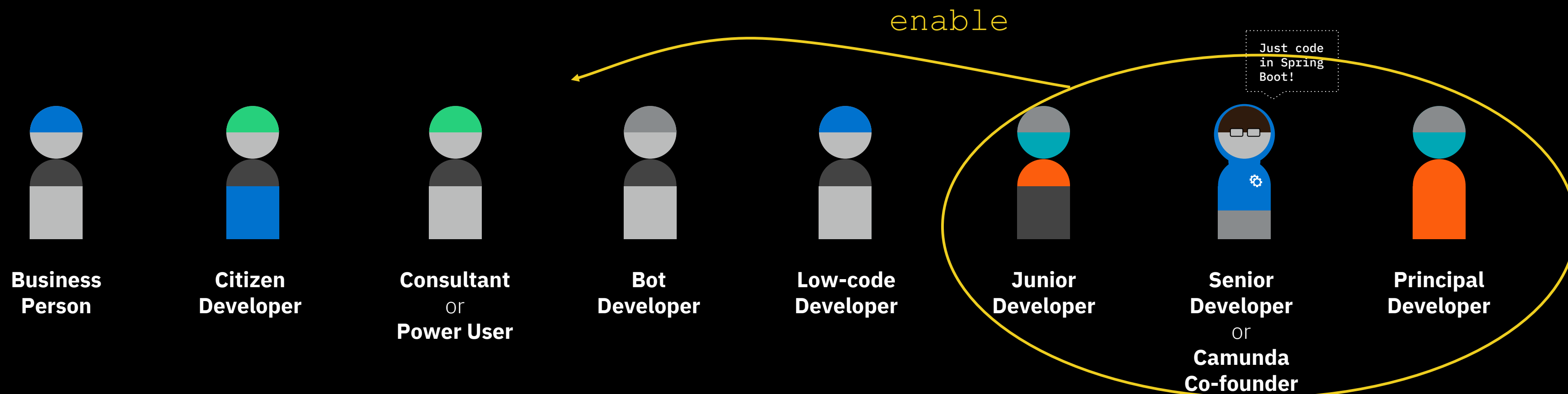
Must not be empty.
The recipient's phone number

JSON

Solution architecture possibilities



Enabling more roles to participate



Developers, prepare to be the heros!

Have even more
impact in
process
automation
endeavours

Help your
organization
automate more

...and you can
still focus on
the cool tech
:-)



And don't worry - our DNA is pro code



...
payment processing
...

CamundaCon 2021: Enabling Core Banking Use Cases with Camunda Cloud

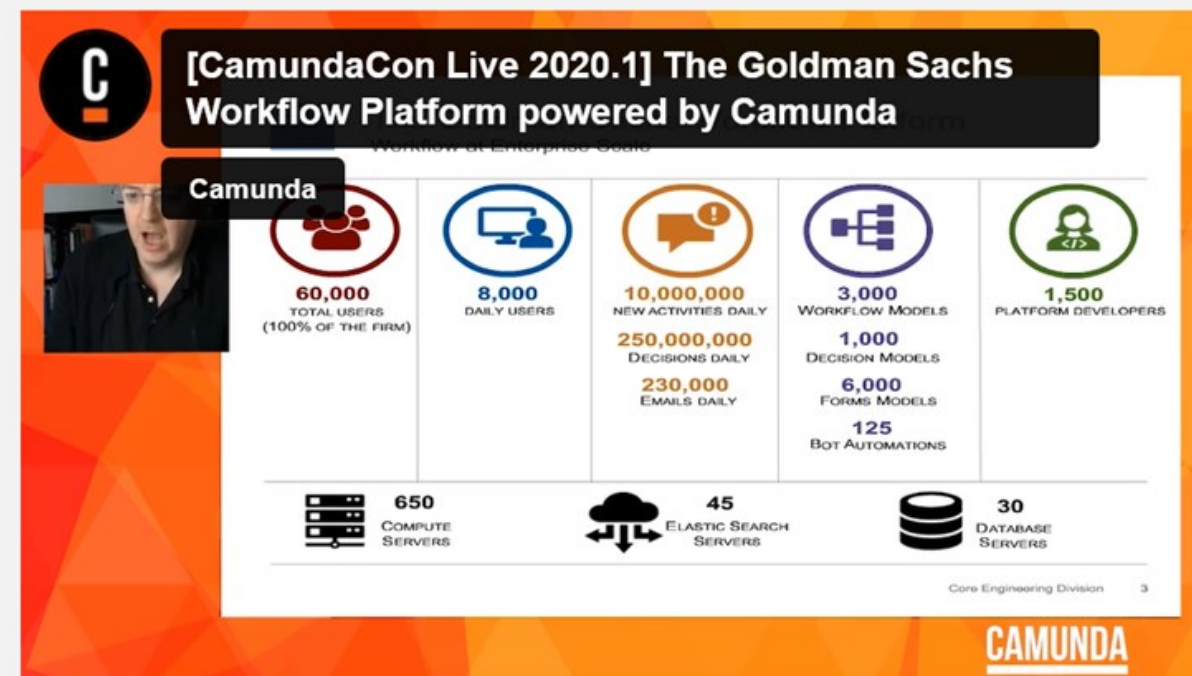
Requirement	Meaning
Multi Client	Ability to provision clusters for multiple clients
Multi Environment	Clients need more than one cluster
Multi Cloud	Clients want to run the platform where their services are
Different Variants per Cloud	Not every client wants to run in the same way
Different Cluster Topologies	Not all components are always deployed

We will cover how we onboarded and extended Camunda Cloud to be the core component of our new Enterprise Process Automation Platform, which enables critical banking use cases. We'll cover the challenges of building our brand new Payments Processing Platform, an event-based microservices solution orchestrated by our Camunda Cloud Corporate Platform.

Learn more about CamundaCon 2021, the virtual conference dedicated to Process Automation, and [watch any session on-demand](#).

...
easy workflows like
“approve access or entitlement”
...

CamundaCon 2020: The Goldman Sachs Workflow Platform powered by Camunda



Get a behind-the-scenes look how Goldman Sachs built one of the largest and most advanced process automation platforms in the industry. Used by more than 40,000 employees running over thousands of unique workflows, the team at Goldman Sachs created a vital backbone for automating many aspects the company's business.

This presentation provides an overview of how Goldman Sachs has embraced BPMN and DMN and its journey to develop an internal automation platform that accelerates engineers and enables non-engineers to deliver digital transformation at enterprise scale. At its core, the platform is powered by Camunda's open source modeling tools and BPM execution engine augmented with Goldman Sachs extensions and integrations.

The presentation covers:

- Model-driven process, task, data, decision and forms development on the platform

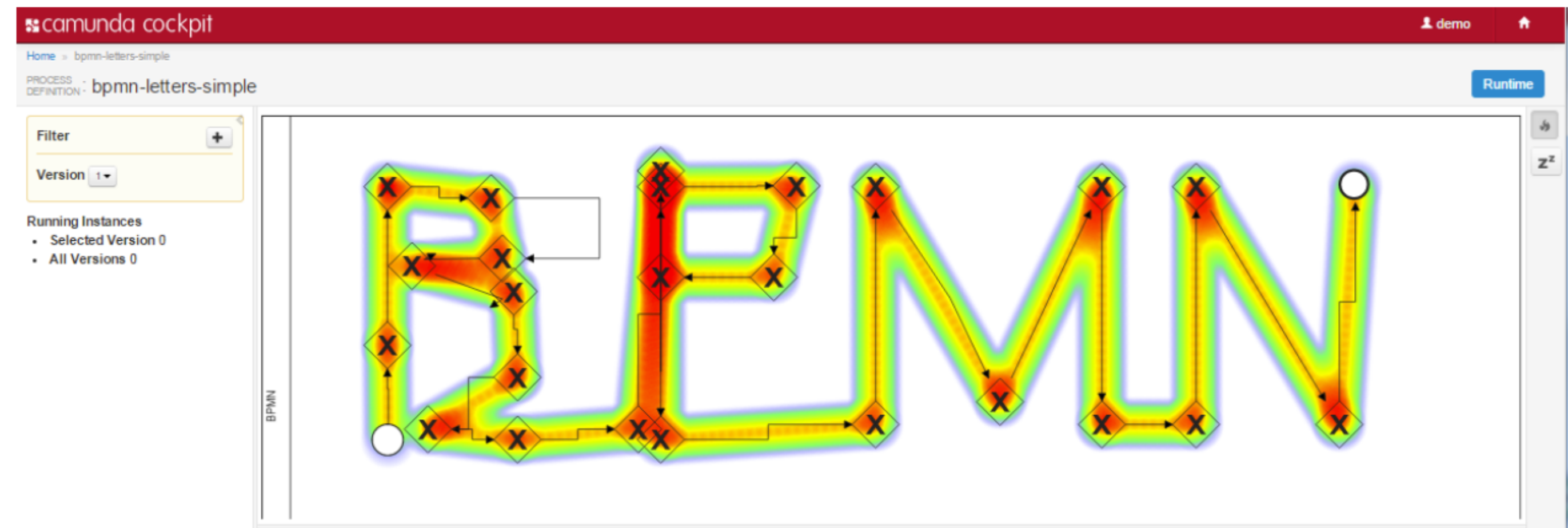
Speaking of history...

Camunda Cockpit Heatmap Plugin

This is a simple [camunda](#) cockpit plugin that showcases, how you can retrieve simple historic statistics data and add some fancy visualization on the process definition view.

For this plugin, my idea was simple transfer historic data to a background-layer of the process diagramm and show a heatmap on sequence flows. By using a heatmap, it is possible to demonstrate, where the process was flowing most often. The more heat a sequence gets, the more relevant is this flow to the process.

You can also think of process mining that way. By realizing the flow with the most heat, you should compare this with your requirements and you are able to do a variance analysis between the previously thought common flow and the actual data.



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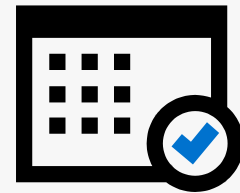
Building a joint solution acceleration roadmap

Mo Ladha



Solution Acceleration

Accelerating time to value



Create Solutions Fast

Accelerate domain, process and technical experts to build solutions fast



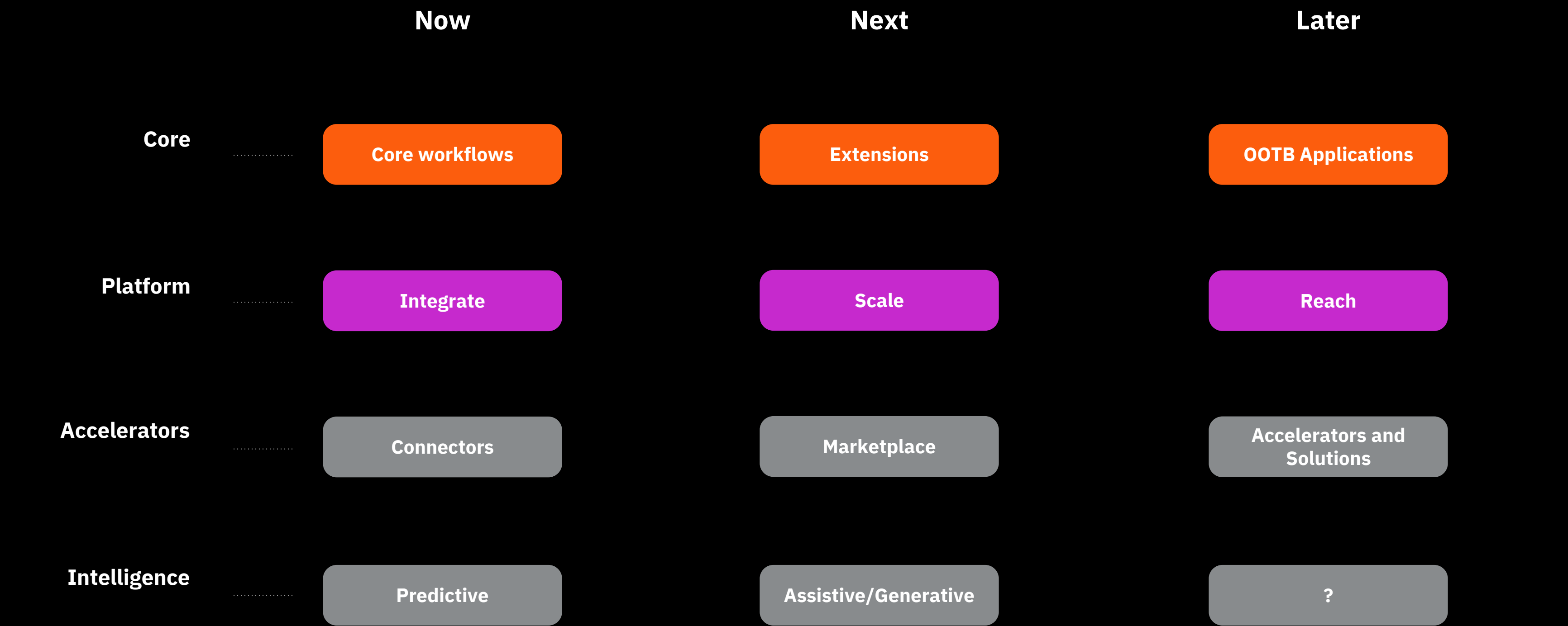
Empower Teams Quickly

Bootstrap any team in the organisation to automate meaningful workflows

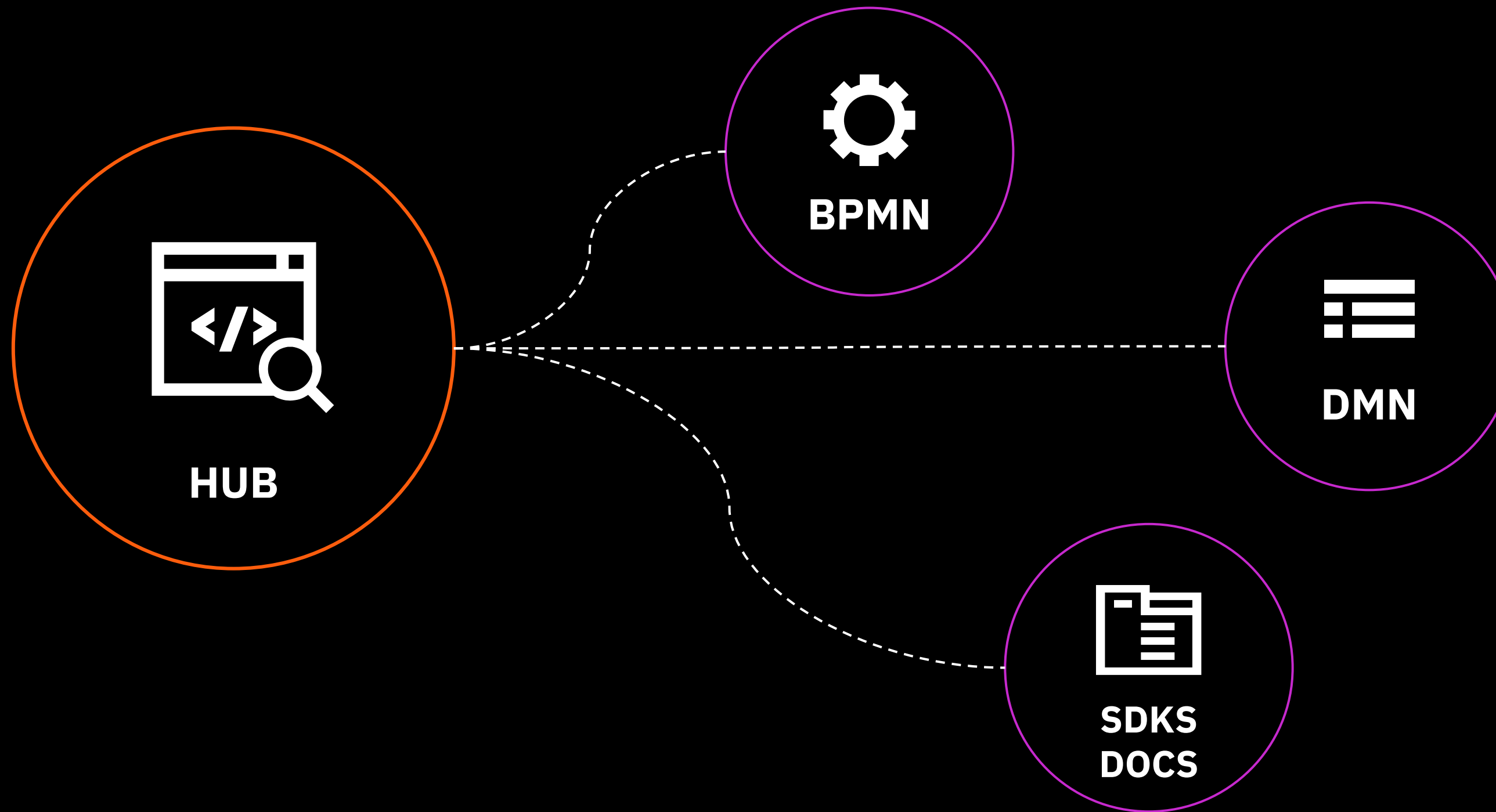
Our Roadmap



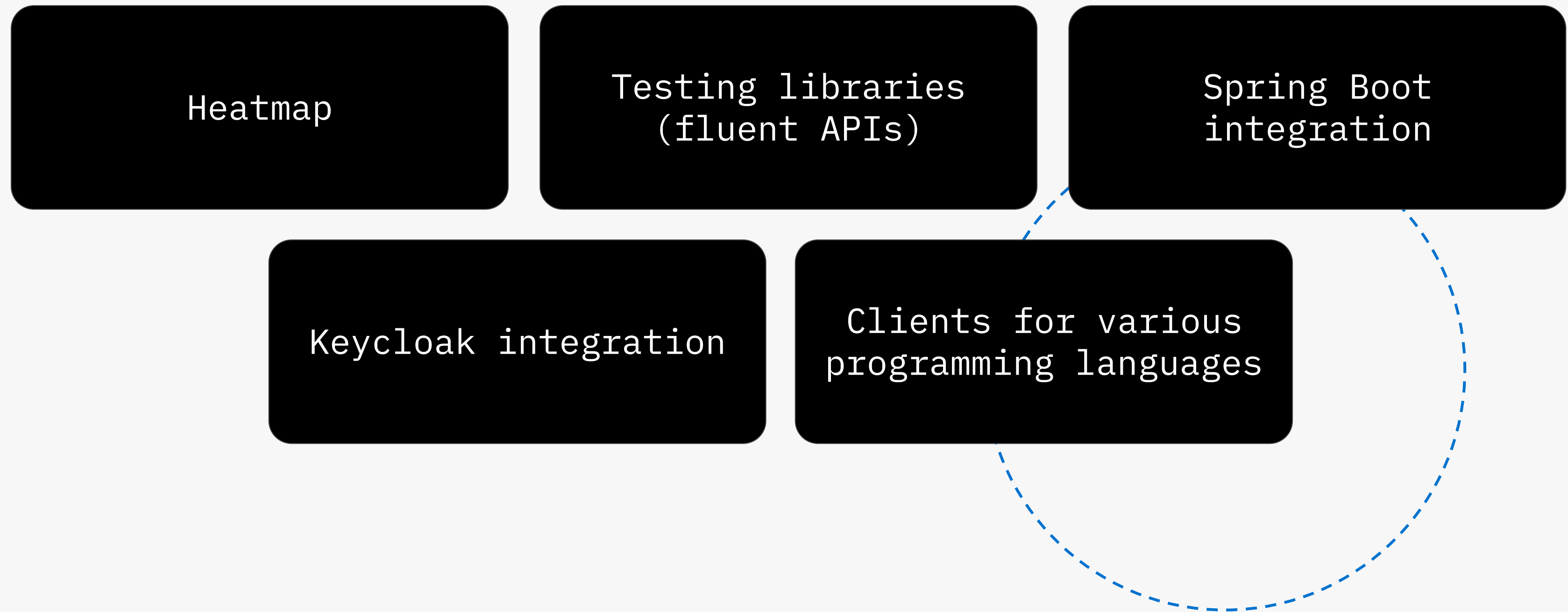
Our Roadmap



Community Core



Community-driven Innovation



Open Architecture

Security



Authenticate

Data Access

Compliance



**Governed
Solutions**

Architecture

Cloud



Deploy

Scale

Operations



Test

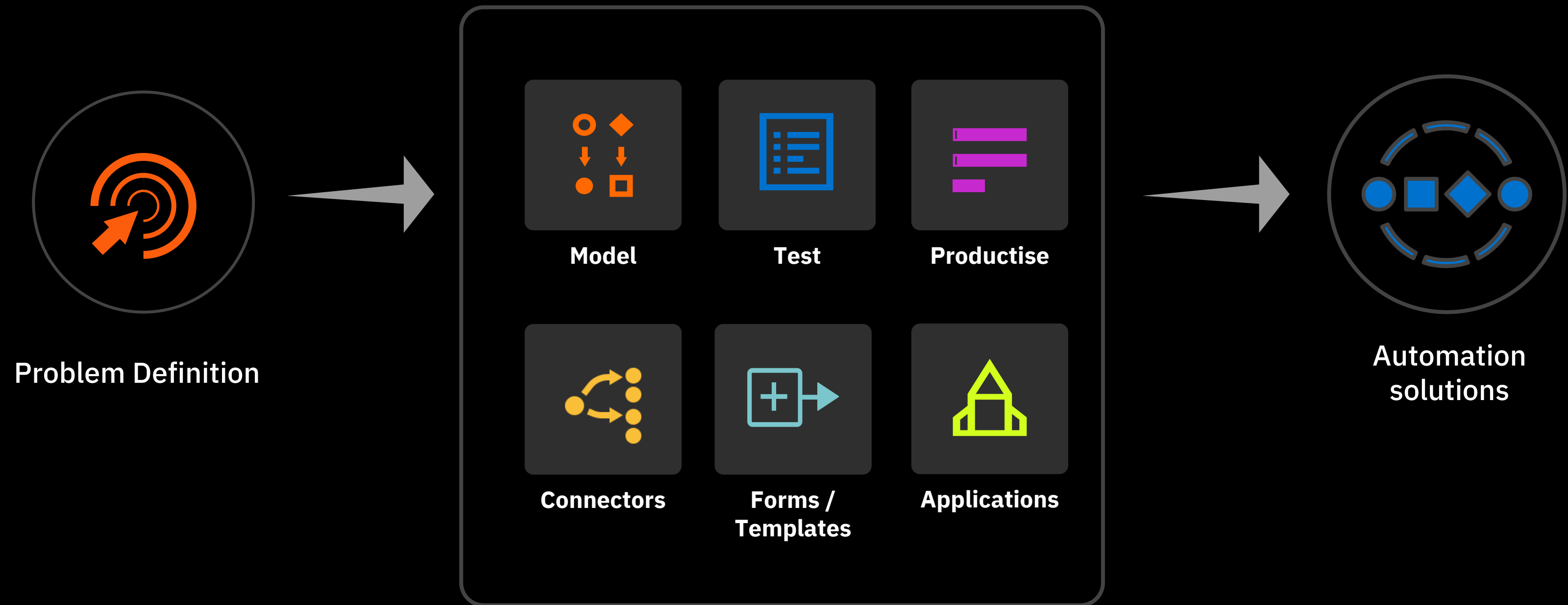
Audit

Our Roadmap

	Now	Next	Later
Core	Core workflows	Extensions	OOTB Applications
Platform	Integrate	Scale	Reach
Accelerators	Connectors	Marketplace	Accelerators and Solutions
Intelligence	Predictive	Assistive/Generative	?

Low Code Accelerators

Collaboratively design, implement, and publish process applications



Marketplace Coming...

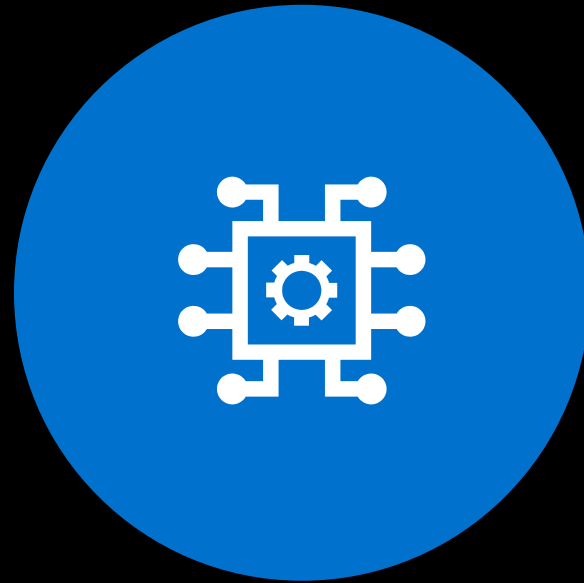
Create + share connectors on both a private and public marketplace



Our Roadmap

	Now	Next	Later
Core	Core workflows	Extensions	OOTB Applications
Platform	Integrate	Scale	Reach
Accelerators	Connectors	Marketplace	Accelerators and Solutions
Intelligence	Predictive	Assistive/Generative	?

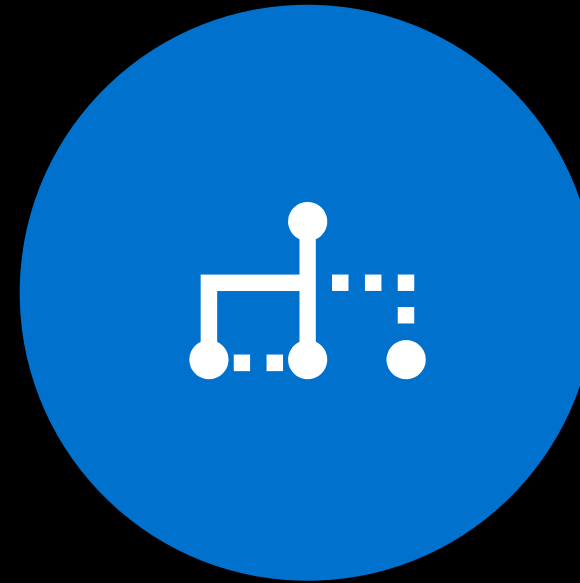
Where will we AI?



Predictive

Predictive AI uses instance data to make improvements to process models

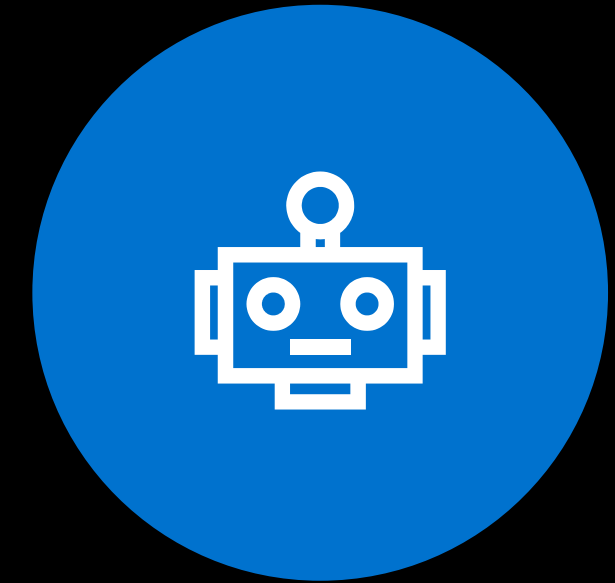
Example: Predictive decision



Generative

Generative AI to create process from simple language constructs

Example: Form Generator



Assistive

Assisted AI uses machine learning to assist task completion

Example: Customer Service Helpers to create responses

Our Roadmap



Camunda Developer Hub

camunda.com/developers

How to Contribute

From something as little as a typo in the documentation to something bigger like a proposal or contribution of a whole new module, we create a constructive atmosphere in which your contribution advances the Camunda community. There are lots of ways to contribute.

Codebase

Make your idea part of Camunda by contributing code or documentation.

→ [Contribute to the codebase](#)

Expertise

Help other users get their processes running by sharing your subject matter expertise.

→ [Share your expertise](#)

Ideas and feedback

Help make Camunda more awesome by contributing feature ideas and feedback.

→ [Share your ideas](#)



bpmn.io

Rendering toolkits and editors for BPMN 2.0, DMN, and forms.

470 followers

<https://bpmn.io>

@bpmn_io

Part of Camunda Services GmbH

Verified

Overview

Repositories

165

Packages

Teams

5

People

43

Security

Insights

README.md

Hi there 🙌

We maintain an eco-system around rendering toolkits and editors for [BPMN](#), [DMN](#), and [forms](#).

Visit our [project website](#) to learn more about us.

Resources

- [Community forum](#)
- [What we work on](#)

Search or jump to...

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camunda / zeebePublic

> CodeIssues442Pull requests22ActionsProjects2WikiSecurity323Insights

main209 branches345 tagsGo to fileAdd fileCode

zeebe-bors-camunda[bot] and dependabot[bot] merge: #12671 #12...

0dfab124 hours ago19,474 commits

.ci/scripts/distribution

ci(jenkins): remove unused Jenkins related files

last week

.github

deps(renovate): enable dependency dashboard

last week

.idea

chore(config): bump google-java-format plugin required version to 1...

2 months ago

.mvn

build: upgrade to maven 3.9.0

2 months ago

atomix

merge: #12613

3 days ago

backup-stores

style: fix style violations

3 days ago

Awesome Camunda Platform 8 Connectors

awesomecontributeprojectCompatible withCamunda Platform 8

[Camunda Platform 8 Connectors](#) [Code of Conduct](#) [Contributing](#)

A curated list of awesome [Camunda Platform 8 Connectors](#) projects, driven by the Community, Partners, and Camunda. We are excited to empower our ecosystem to build connectivity, accelerating process orchestration with any system!

Contents

- [Out-of-the-box Connectors](#)
- [Partner Connectors](#)

Thank You



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camunda.com