LOW CODE APPS WITH

PROCESS-DRIVEN APPLICATIONS

TRILHA - ARQUITETURA JAVA

Karina Varela

Software Maintenance Engineer at Red Hat

WHAT DO YOU SEE?

DIGITAL TRANSFORMATION IS EVERYWHERE

"Everyone like progress, but no one likes change.

That's why leadership is hard."

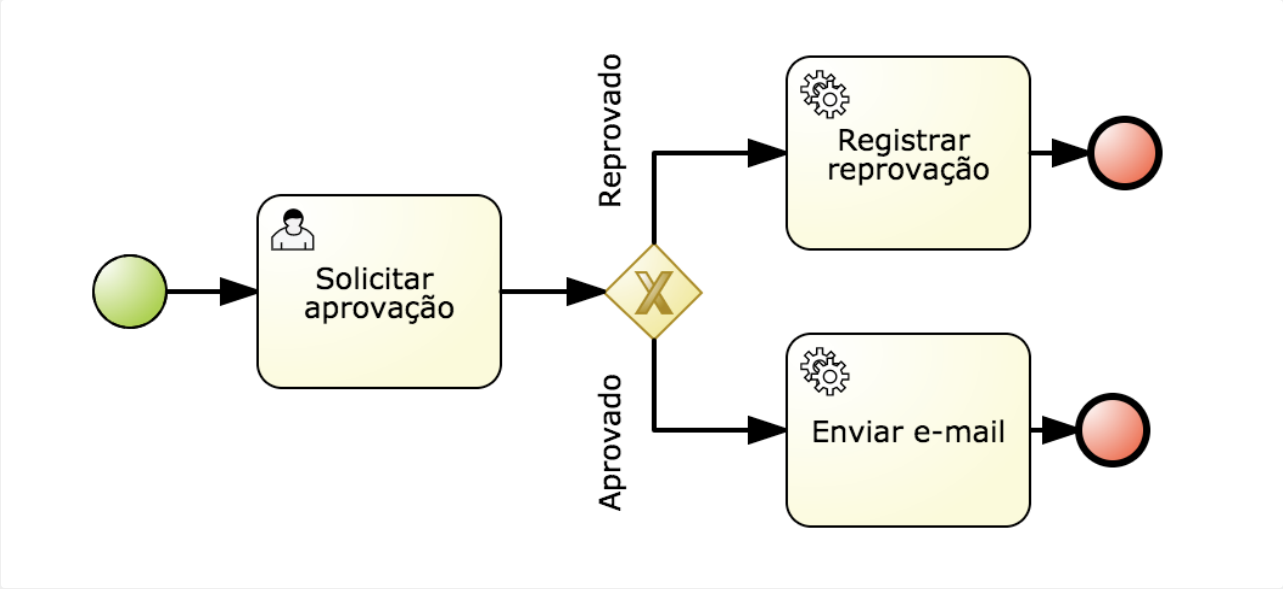
Geoffrey Garret

Dean, Wharton School of the university of pennsylvaniaa

BUT...

...WHAT IS A PROCESS?

...THIS IS A PROCESS



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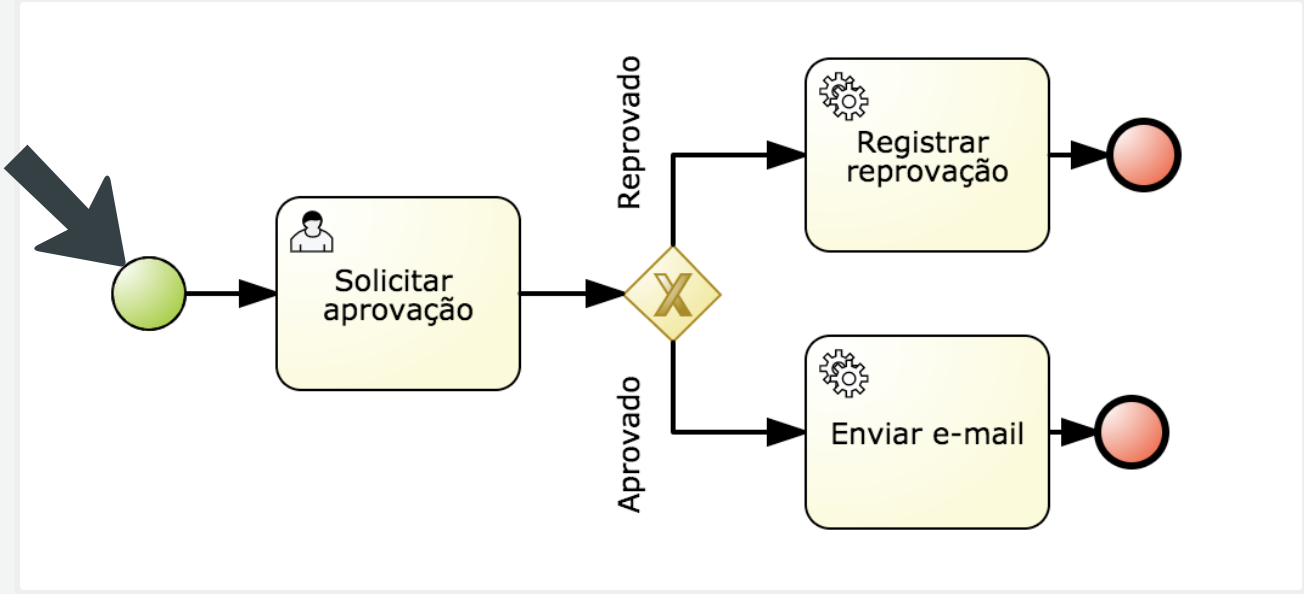

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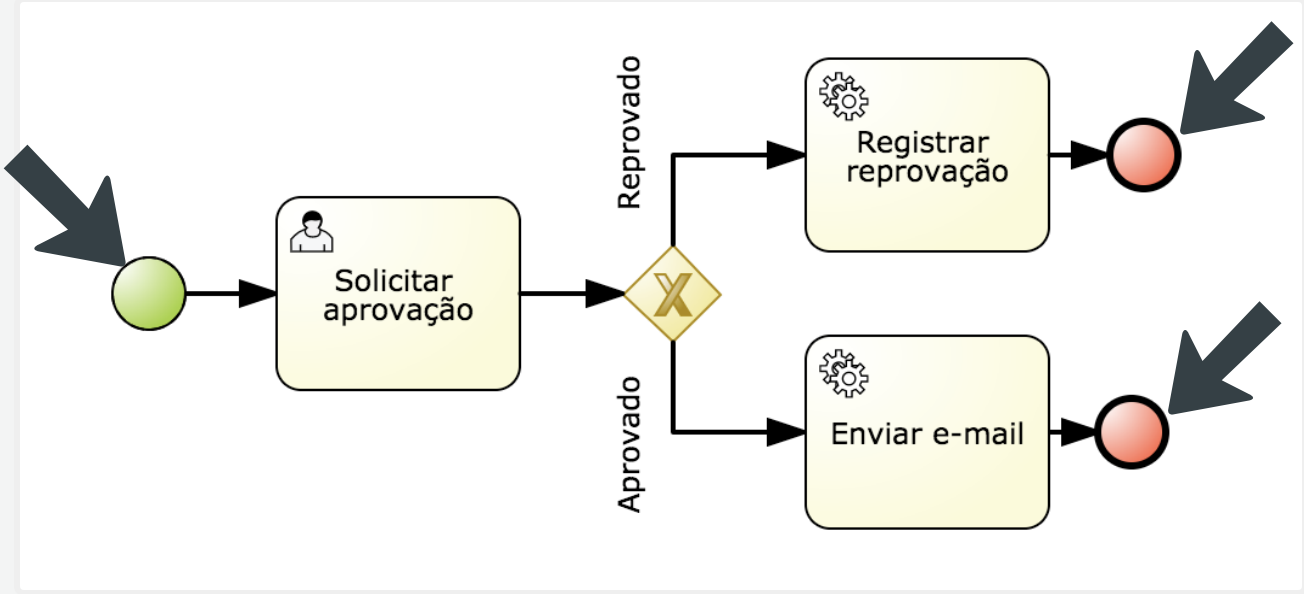

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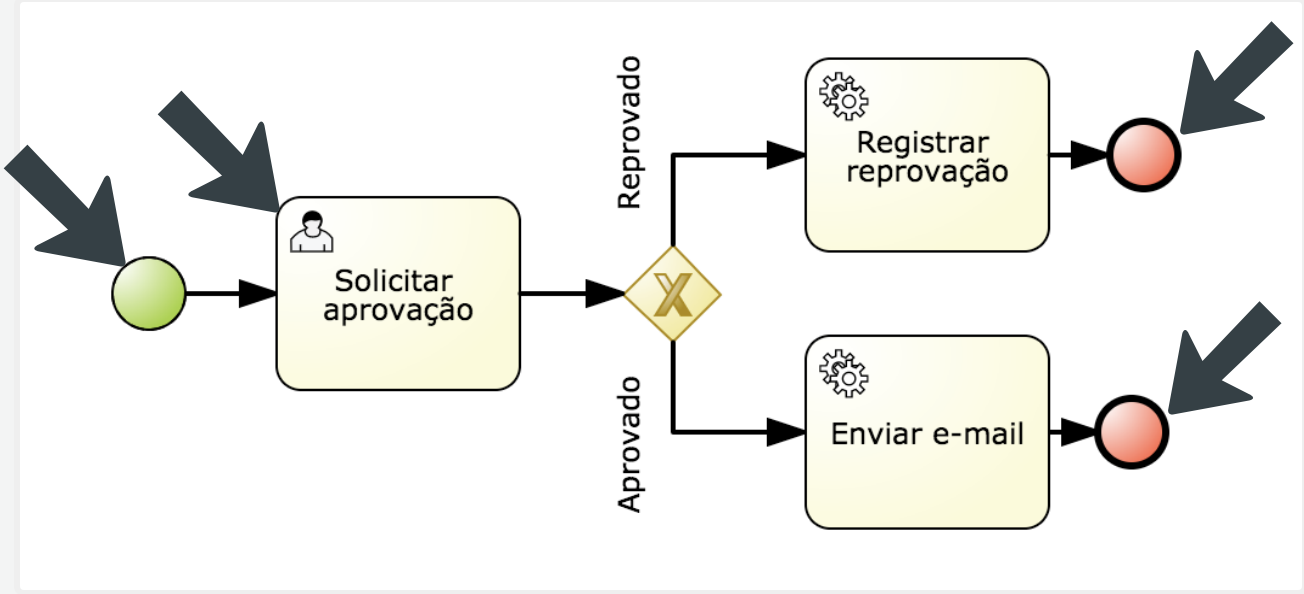

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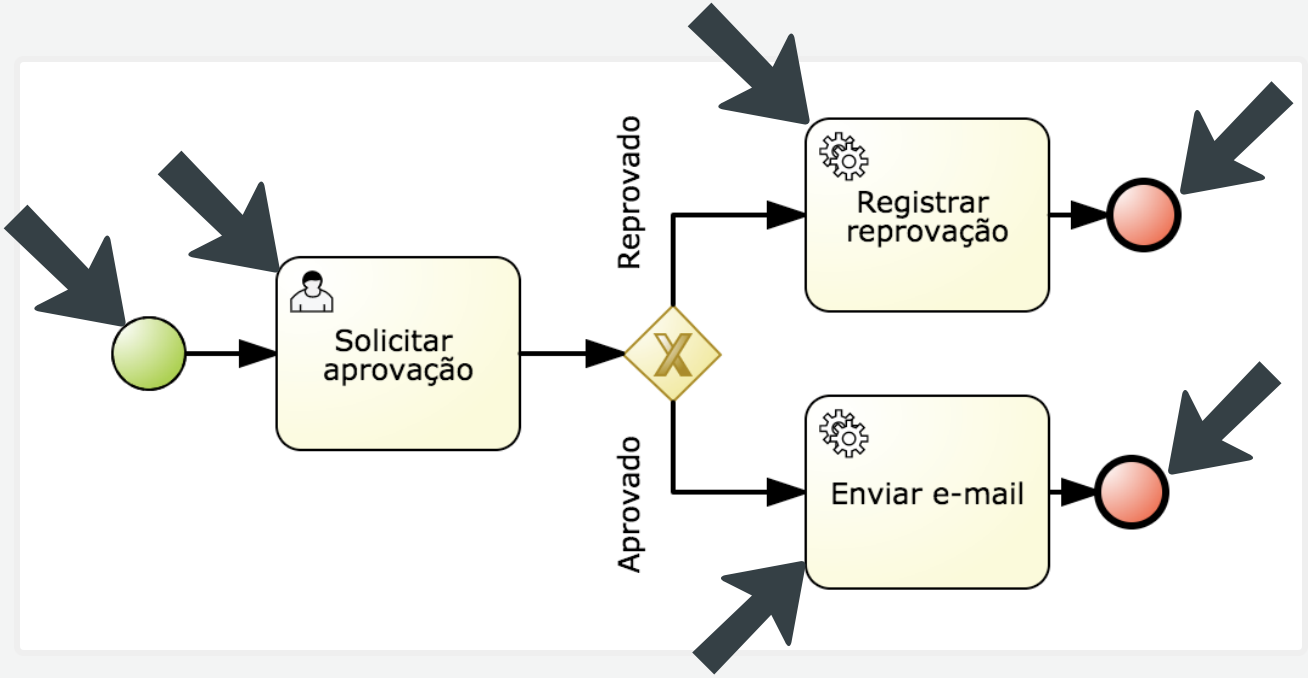

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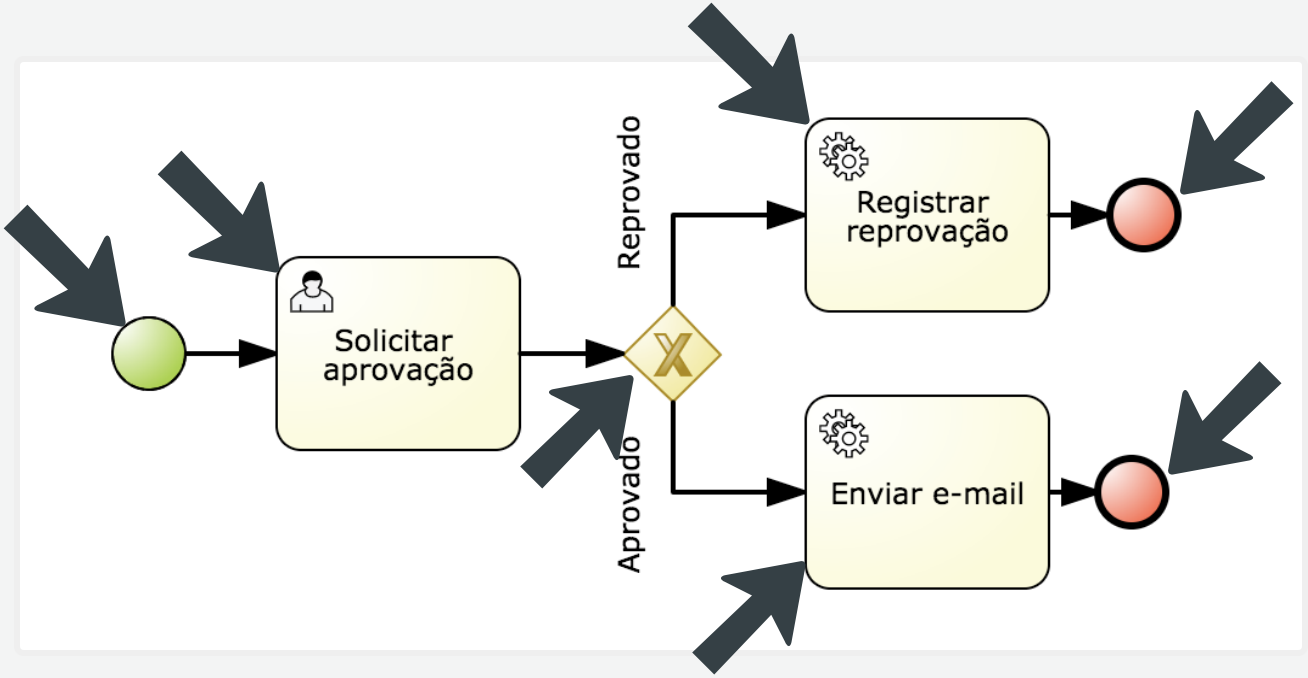
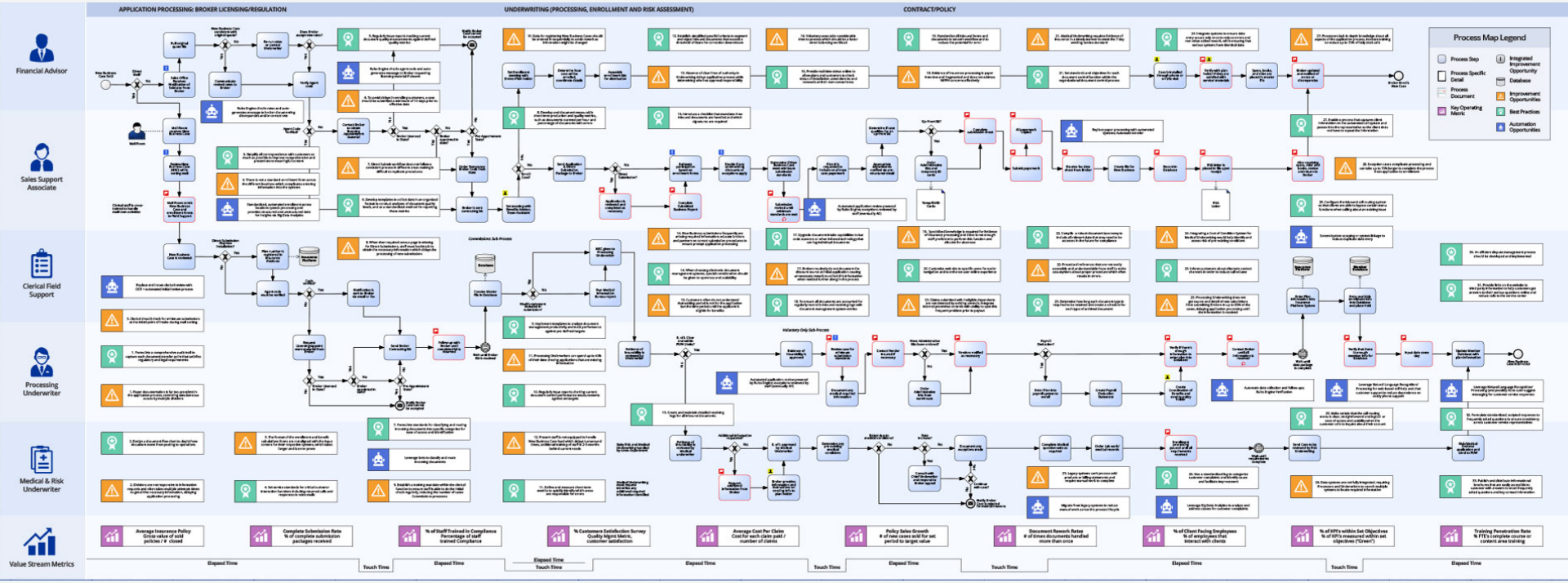


… THIS IS ALSO A PROCESS

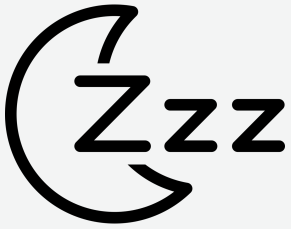
(Insurance process in BPMN2 Notation)



*source: https://processreopt.com/wp-content/uploads/2017/12/map_insnb_rpa1.jpg

IF CAN YOU **BREAK** IT INTO
SMALLER PIECES

...THEN IT IS A **PROCESS**!



THE SHIFT OF APPLICATION DEVELOPMENT

THEN:

(Monolithic) Application

Code

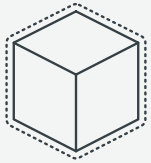
IDE

Developer

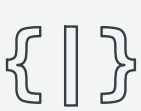
NOW:

Microservices Application

Containers

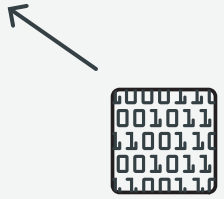


Models



Business modeling tool

Dev



Ops

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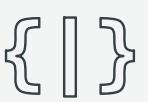
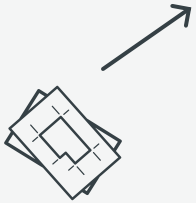




Biz

Dev

Ops

HOW DOES IT FIT OUR REAL-WORLD ARCHITECTURE?

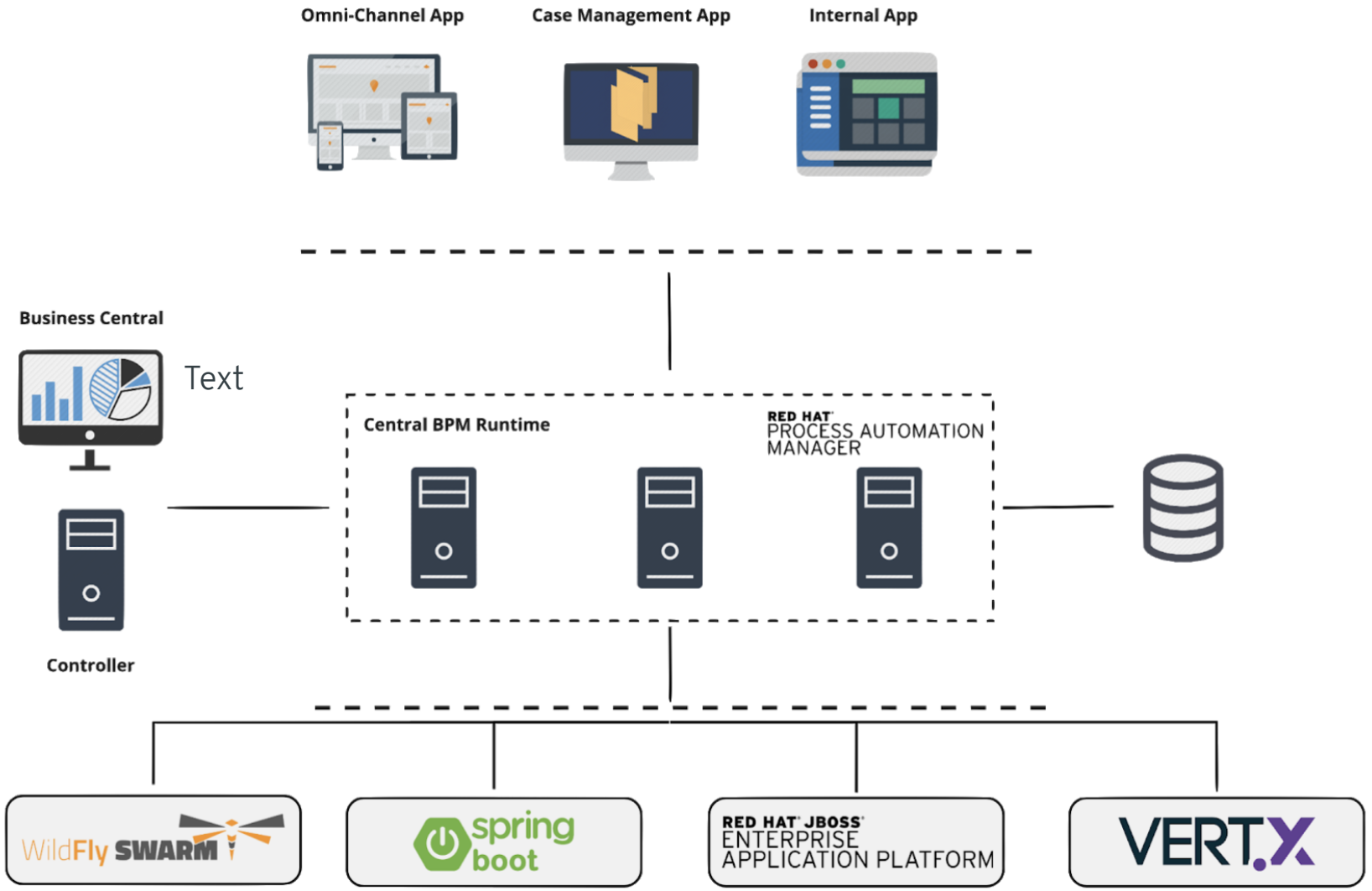
BPM is evolving

...from a **centralized**,

service **orchestration** and

state management platform

CENTRALIZED BPM



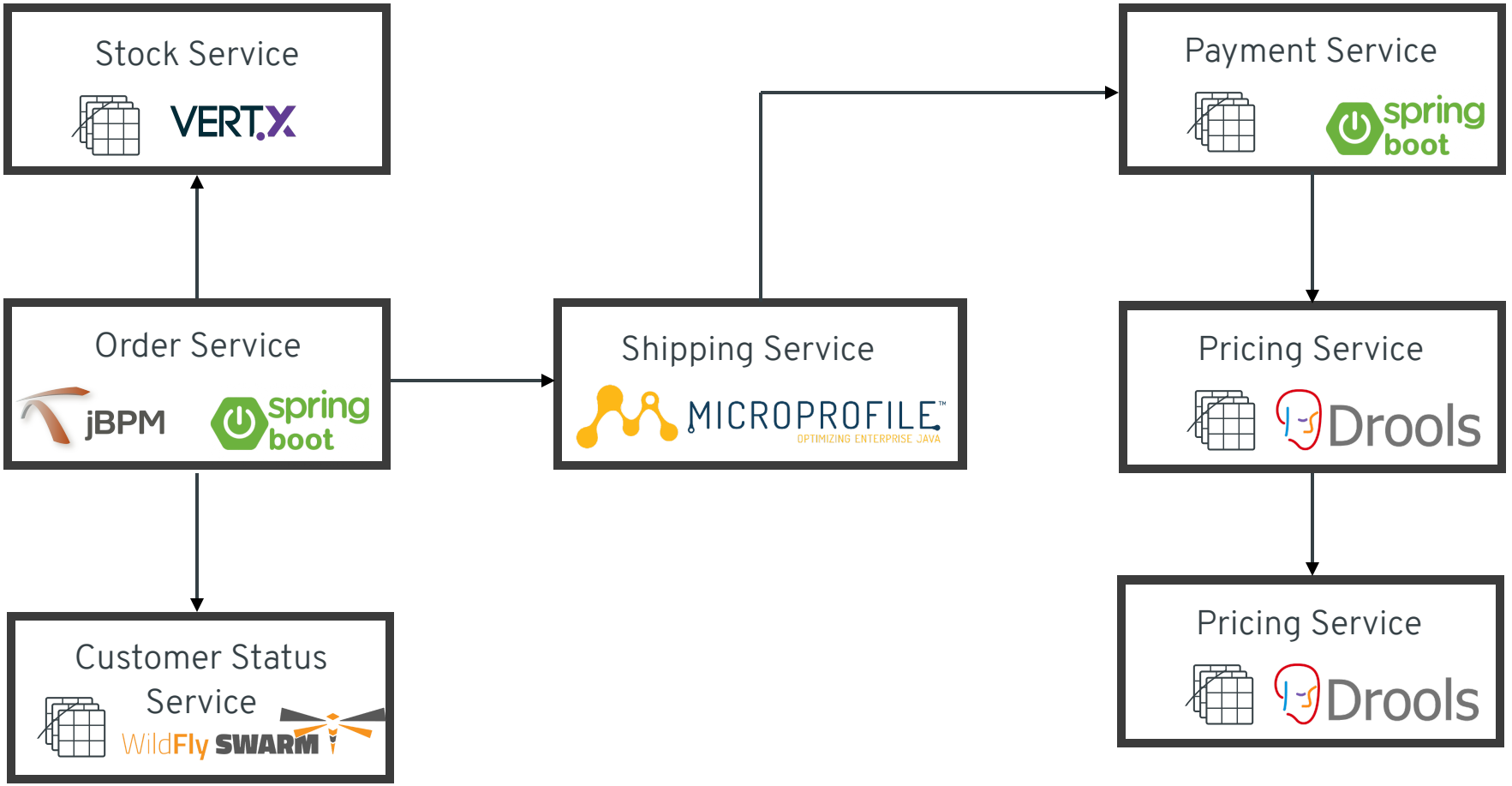
...to **decentralized,**

distributed model,

providing process automation capabilities as an

implicit feature of Microservices architectures.

DECENTRALIZED BPM



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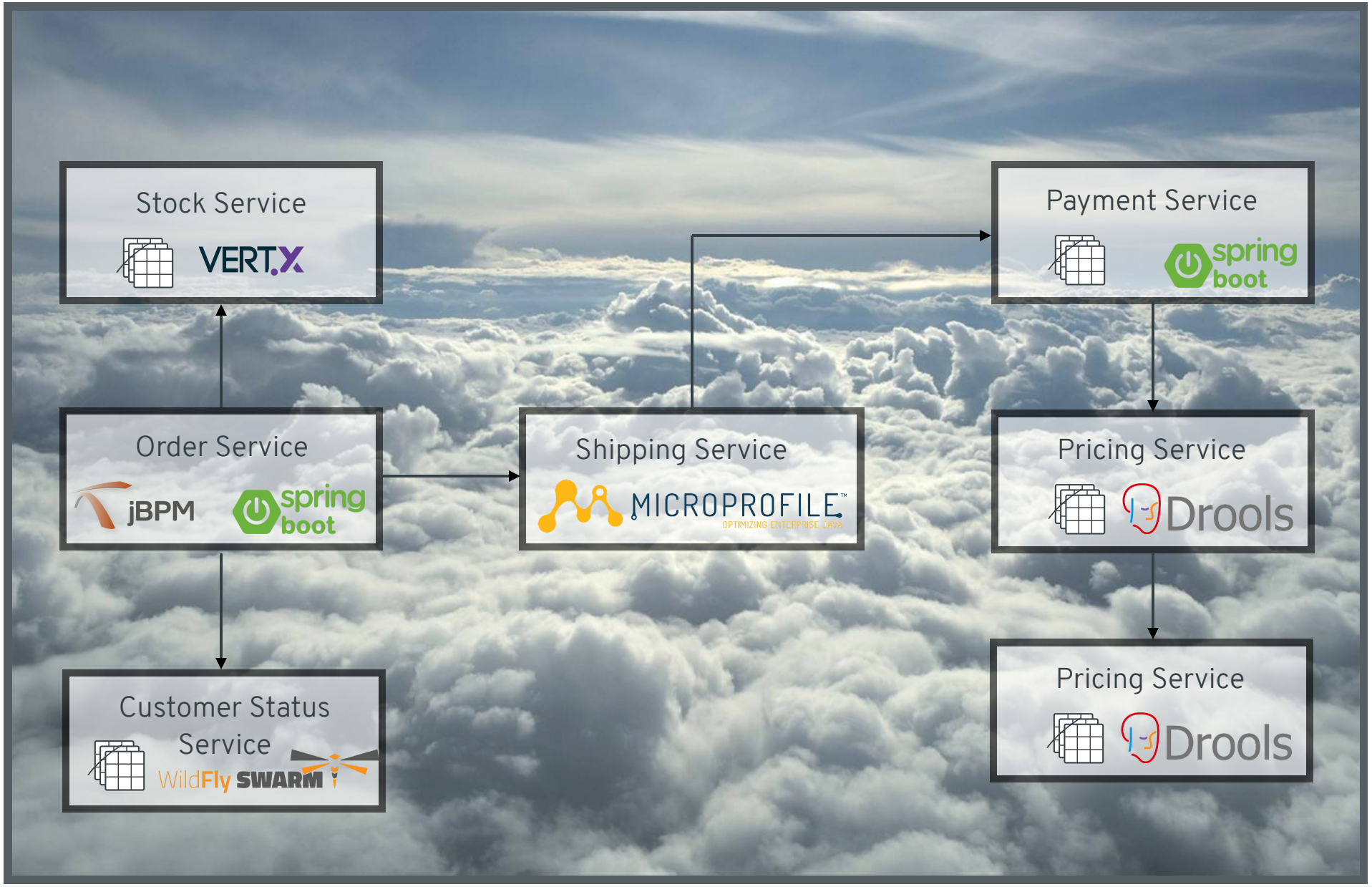
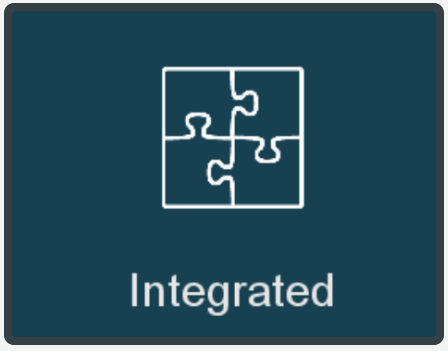


KEY CHARACTERISTICS OF PROCESS-DRIVEN APPLICATIONS

Busines Characteristics

Technology Characteristics



LET'S ORDER A PIZZA

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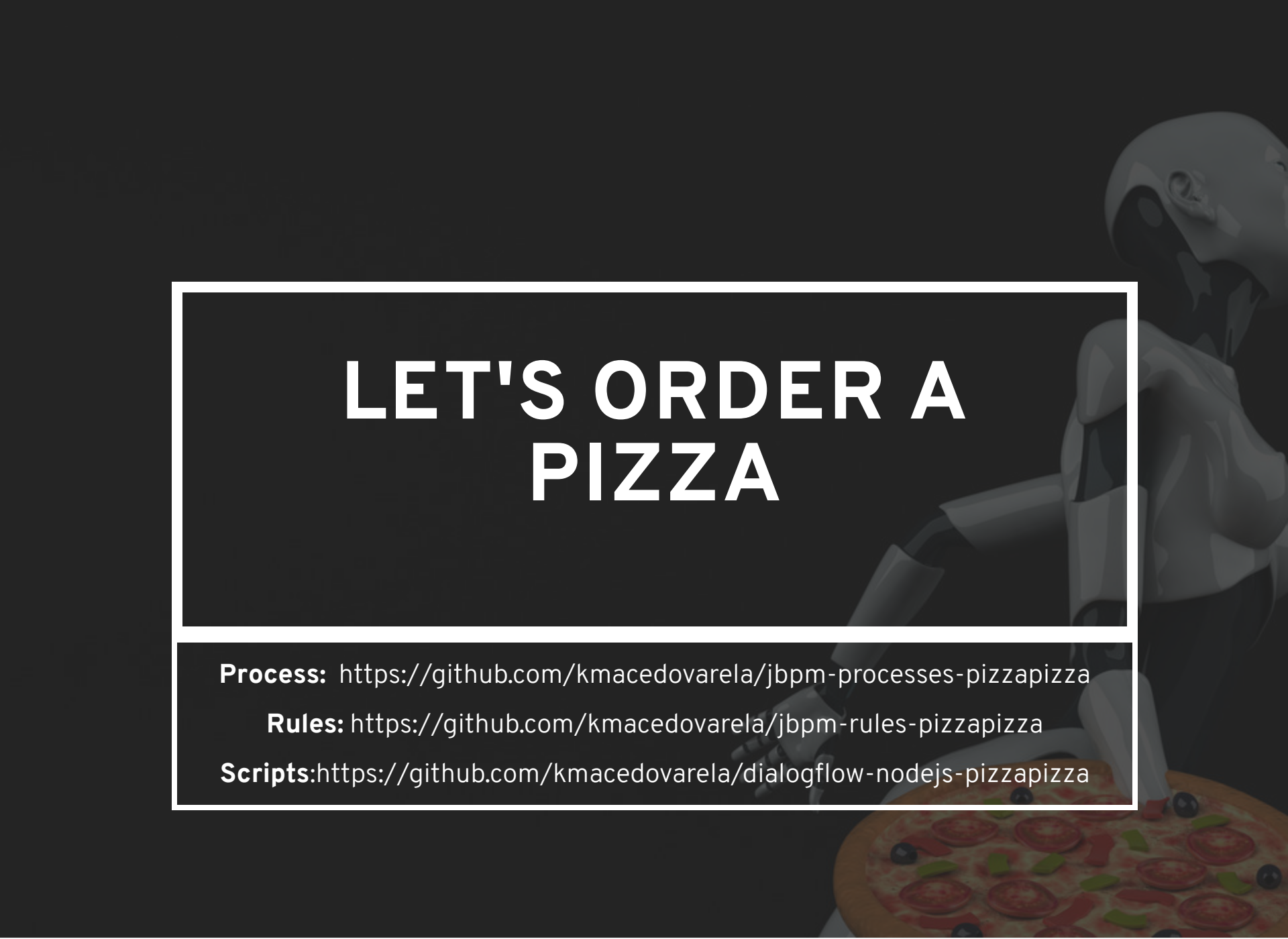
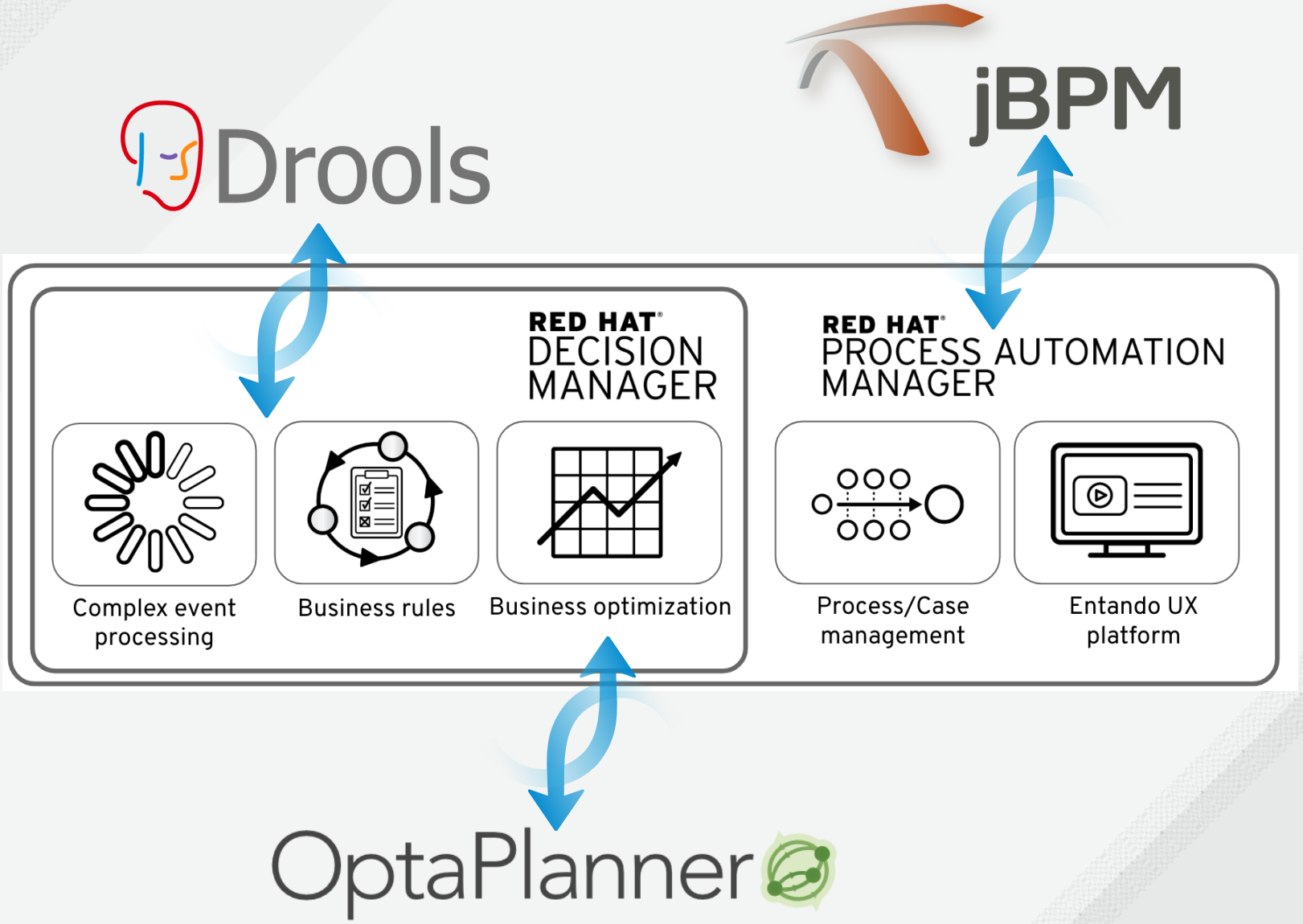


Process: https://github.com/kmacedovarela/jbpm-processes-pizzapizza

Rules: https://github.com/kmacedovarela/jbpm-rules-pizzapizza

Scripts:https://github.com/kmacedovarela/dialogflow-nodejs-pizzapizza

RUNNING PROCESS-DRIVEN APPLICATIONS



UNDER THE COVERS

code repo

Business Central
(authoring & monitoring)

WildFly jBPM

Order Service API

node Firebase

google action

Order Service

Dialogflow Google Cloud

maven package
(kjar)

REST

Kie Controller

WildFly jBPM

Process Server

WildFly jBPM

Decision Server

OPENSHIFT Drools

Decision Server

spring boot Drools

Execution Servers

Deploy & Manage

HOW CAN I DO
SOMETHING LIKE IT?

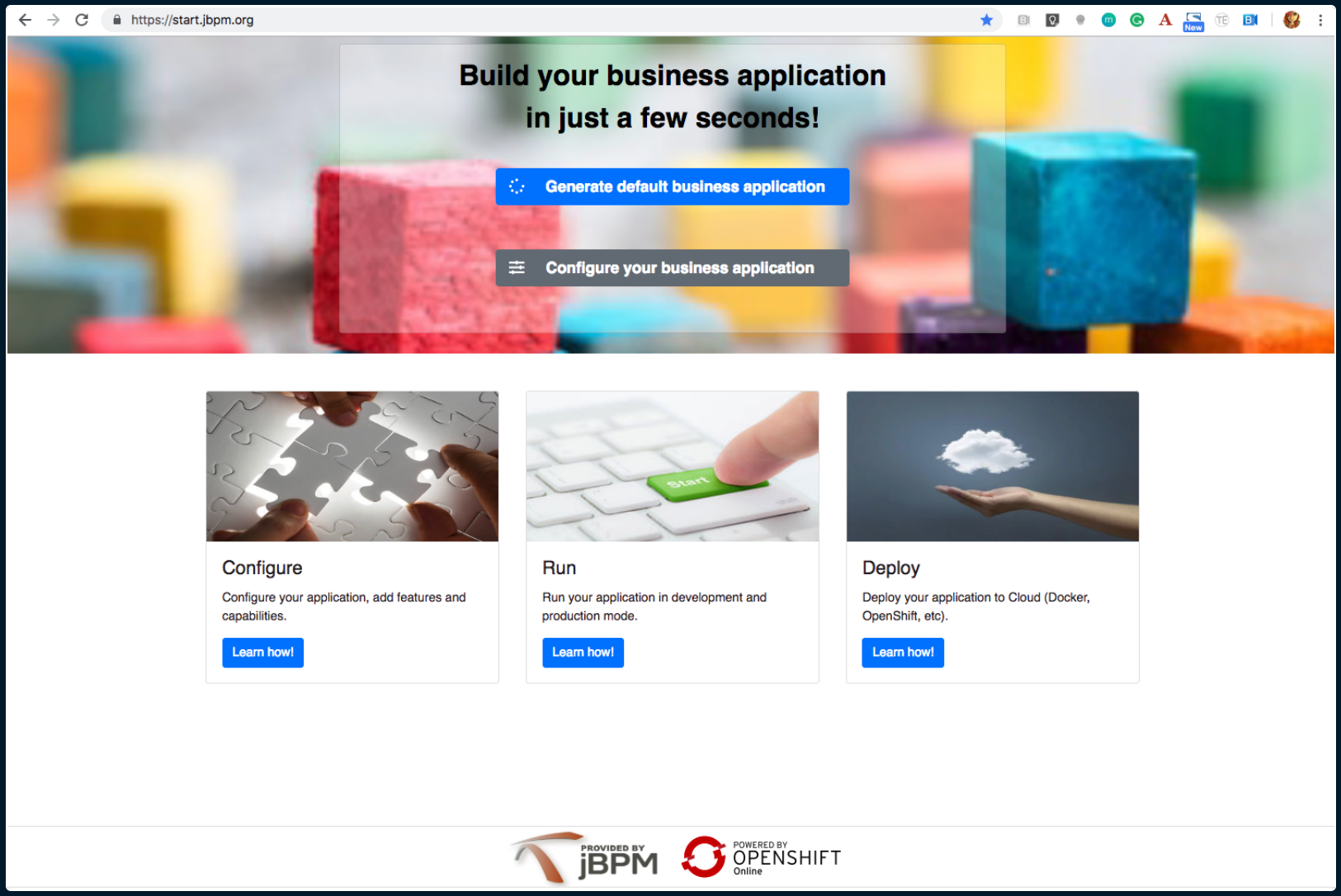
DISCOVER

ARCHITECT

{ | } CODE!

A STARTING POINT...

HTTP://START.JBPM.ORG



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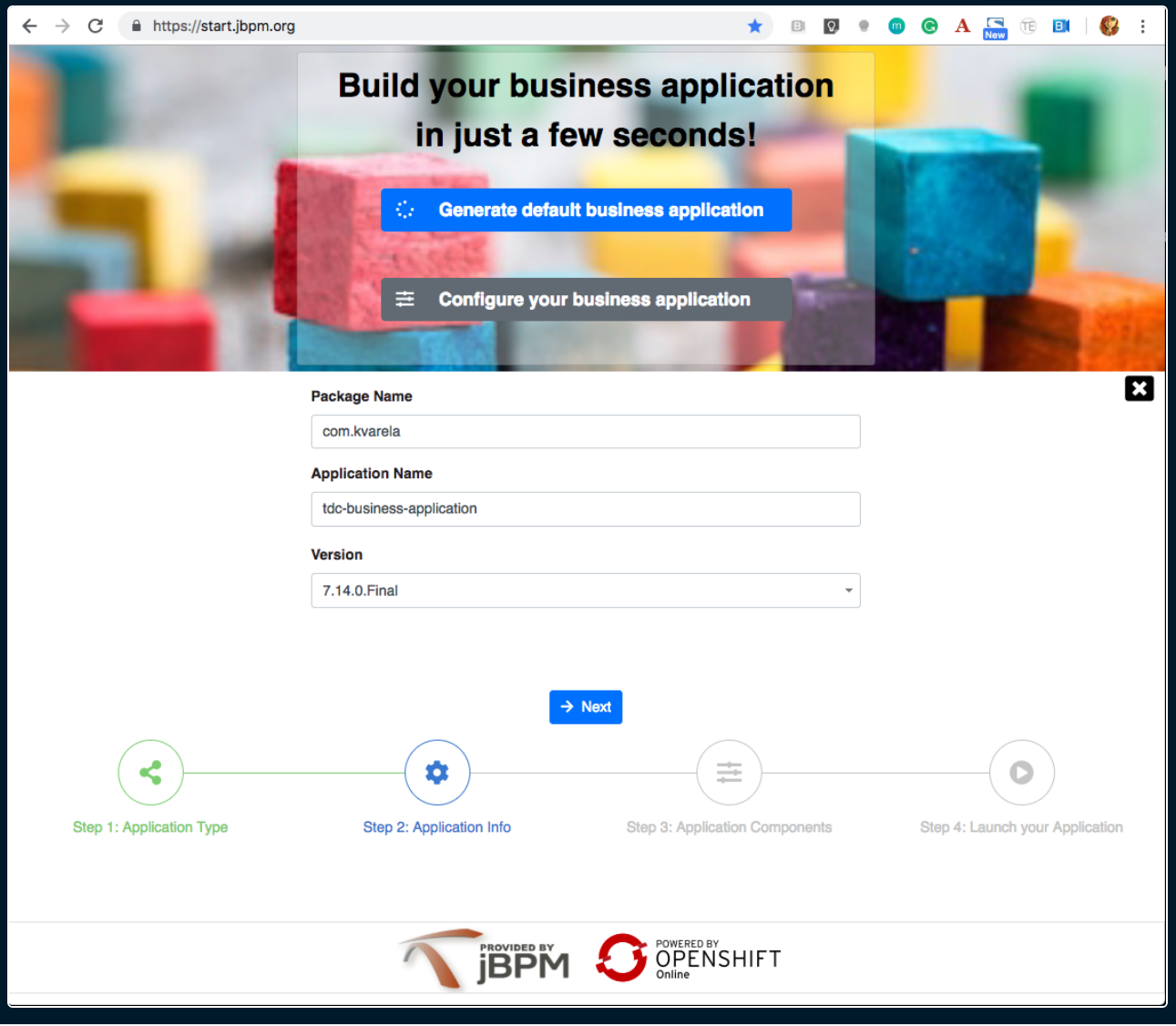

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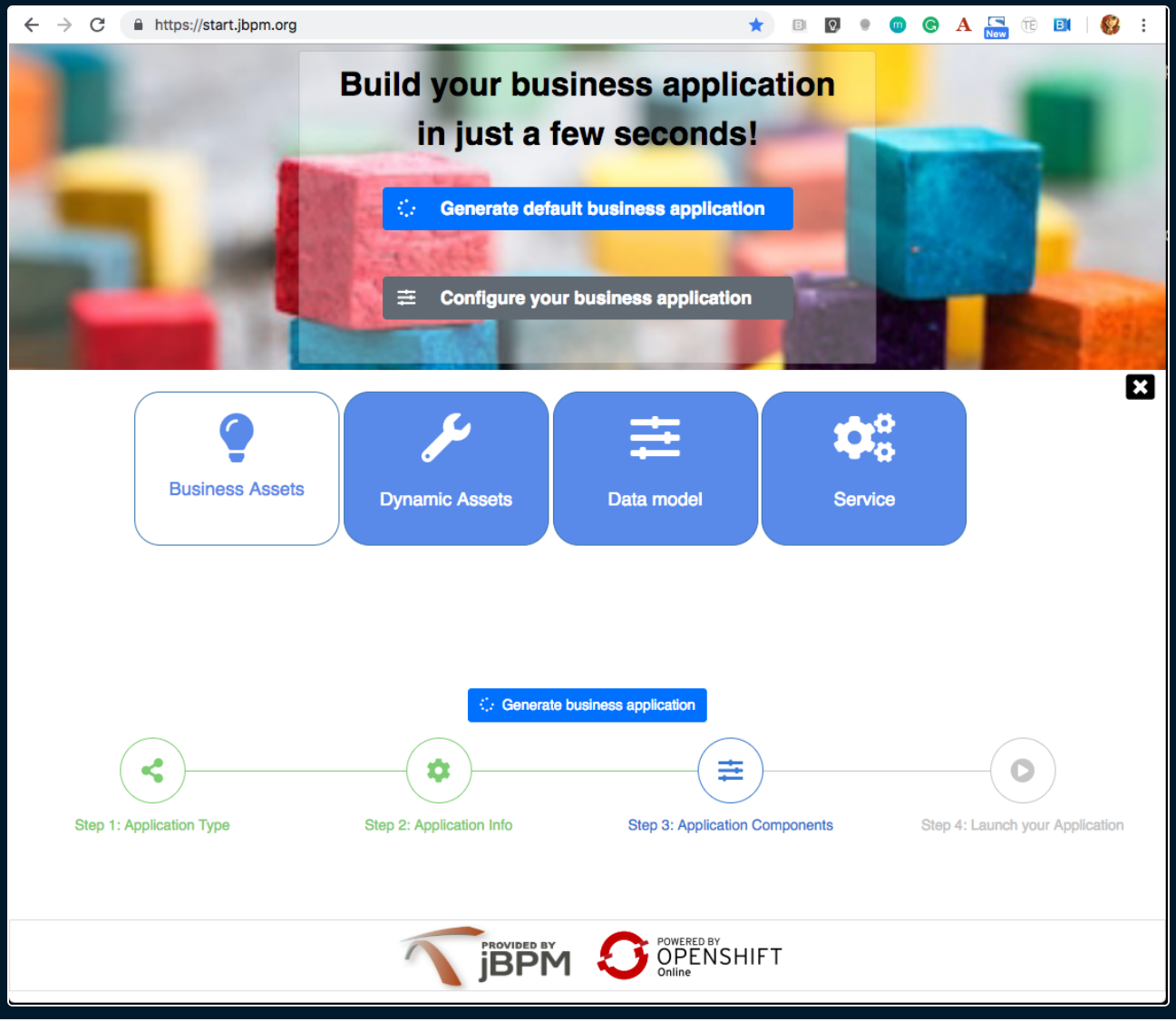

A STARTING POINT...

```
$ unzip tdc-business-application.zip
```

- tdc-business-application-kjar
- tdc-business-application-model
- tdc-business-application-service

```
$ cd tdc-business-application-service

$ launch.sh clean install
```

```
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 15.515 s
[INFO] Finished at: 2018-11-18T19:55:45-02:00
[INFO] Final Memory: 117M/707M
[INFO] ------------------------------------------------------------------------

Total build time: 45s
Launching the application locally...
```

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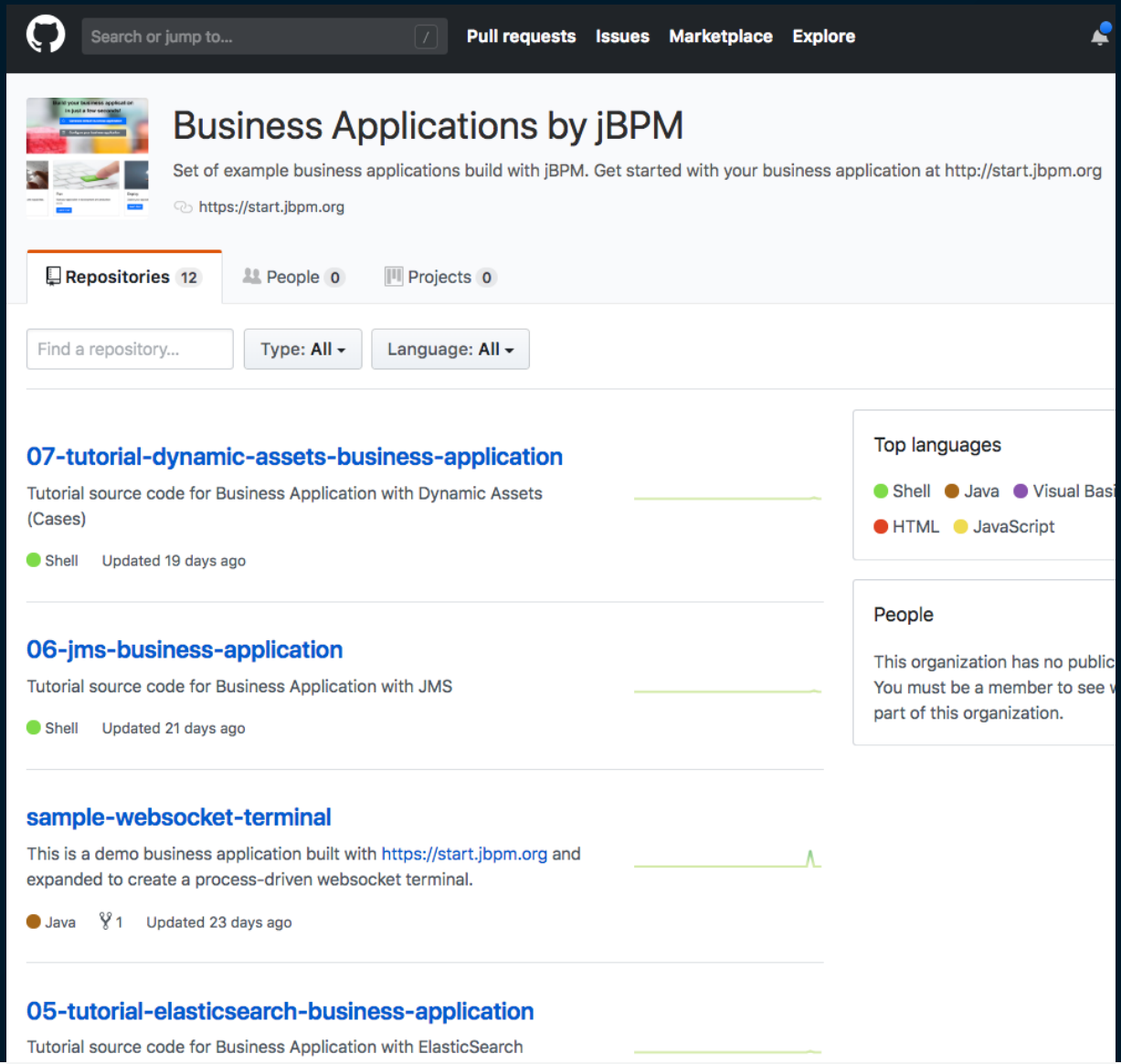
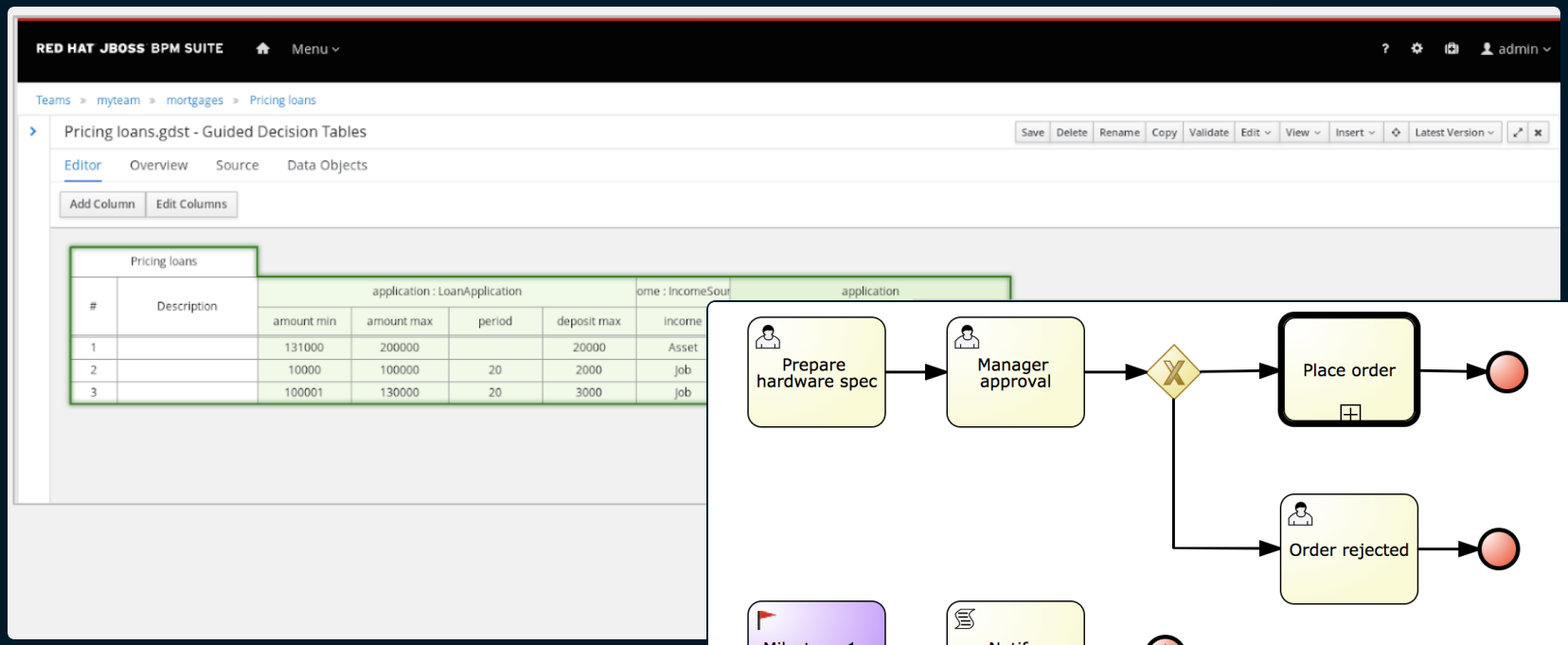
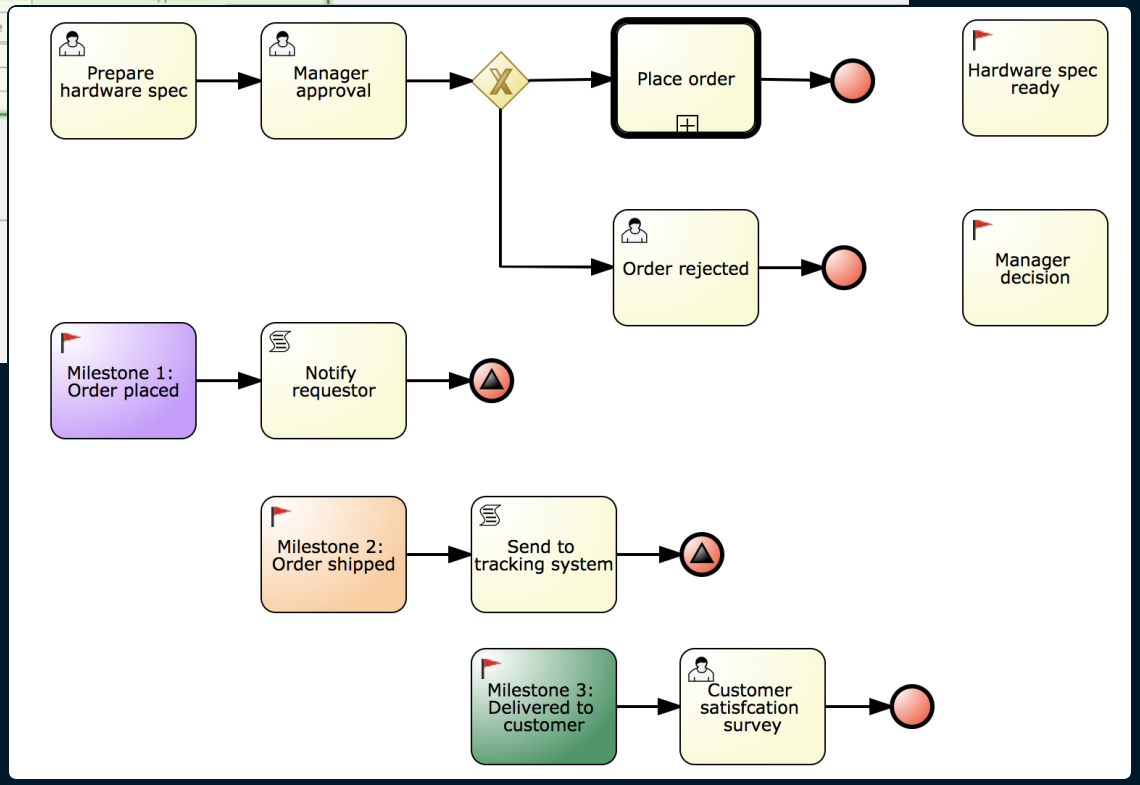
EXAMPLES

HTTPS://GITHUB.COM/BUSINESS-APPLICATIONS



IMPLEMENT YOUR RULES AND PROCESSES





CODE CLIENT APPLICATIONS

RED HAT® JBOSS®
FUSE
For OpenShift

RED HAT® JBOSS®
DATA GRID
for xPaaS

React

RED HAT® JBOSS®
ENTERPRISE
APPLICATION PLATFORM

...

DEPLOY

THINGS TO REMEMBER

QUESTIONS?

GET IN TOUCH
@kahh_macedo
karina@redhat.com
#irc
#jbpm on chat.freenode.net
2078-4944-4519

redhat®

THANK YOU!