



Open Source Process Automation

GET STARTED

Mgr. Ivo Bek, Product Manager

Mgr. Marian Macik, Quality Engineer

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AGENDA

Open Source Process Automation

- ❑ BPM Intro
- ❑ Business automation
- ❑ Architecture
- ❑ New project in Business Central
- ❑ Business assets
 - ❑ Data objects
 - ❑ Business processes
 - ❑ Forms
- ❑ Process administration
- ❑ Team collaboration

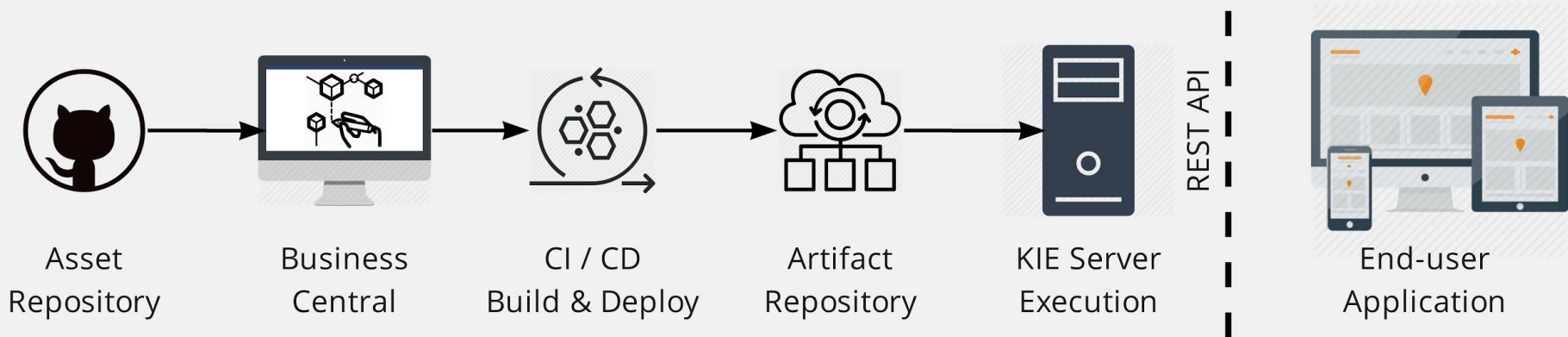
RED HAT®
PROCESS AUTOMATION
MANAGER



Business Central

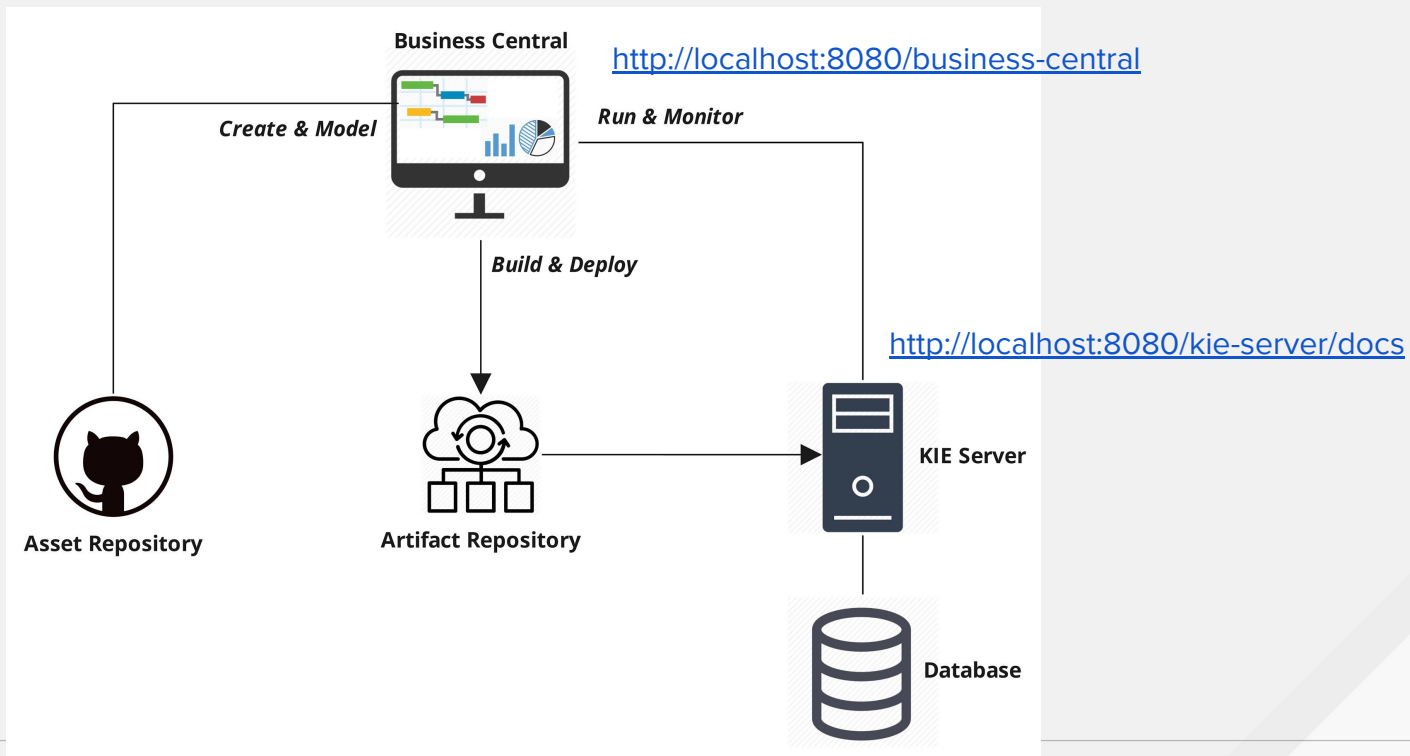


FROM A MODEL TO PRODUCTION



MINIMAL VANILLA ARCHITECTURE

All we need



SETUP

the first steps

- ❑ Download and unzip the [single zip distribution](#)
- ❑ Run:

jbpm-server/bin/standalone.sh (Unix / Linux)

jbpm-server/bin/standalone.bat (Windows)

- ❑ Add users and groups
- ❑ Use H2/MySQL/PostgreSQL database (optional)
- ❑ More info in [Getting Started Guide](#)

NEW PROJECT IN BUSINESS CENTRAL

- ❑ Based on Maven and stored in Asset repository (GIT)
- ❑ Try Samples
- ❑ SNAPSHOT development version
- ❑ Add assets
 - ❑ Data Object
 - ❑ Business Process
 - ❑ Form
 - ❑ DMN Model
 - ❑ Test Scenarios
- ❑ Build and Deploy

The screenshot shows a web application interface. In the foreground, a modal dialog titled "Add Project" is open. It has a close button (x) in the top right corner. The dialog contains a "Name" input field with the text "MyFirstProject", a "Description" input field, and a link labeled "Show Advanced Options". At the bottom right of the dialog are "Cancel" and "Add" buttons. The background is a dimmed view of a "Metrics" page. It displays "Nothing Here" and a message: "There are currently no projects available for you to view or edit. To get started, create a new project or import one." Below this message are buttons for "Add Project" (with a dropdown arrow), "Try Samples", and "Import Project".

DATA MODELING

Spaces > myteam > MyFirstProject > Person

> **Person.java - Data Objects** Save Delete Rename Copy Validate Latest Version View Alerts

Model Overview Source

Person + add field

Identifier	Label	Type	
name	Name	String	Delete
age	Age	Integer	Delete

'age'- general properties

Identifier:

Label:

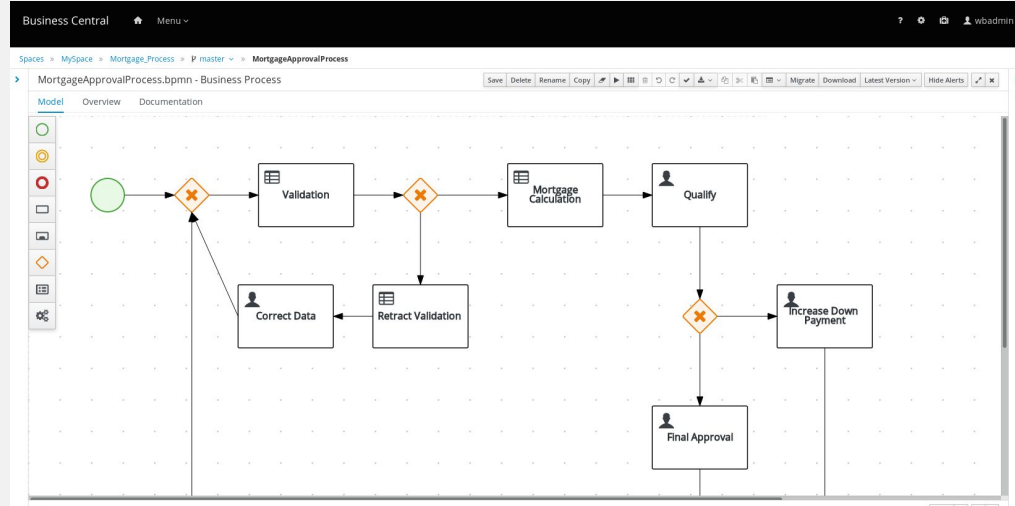
Description:

Type:

List

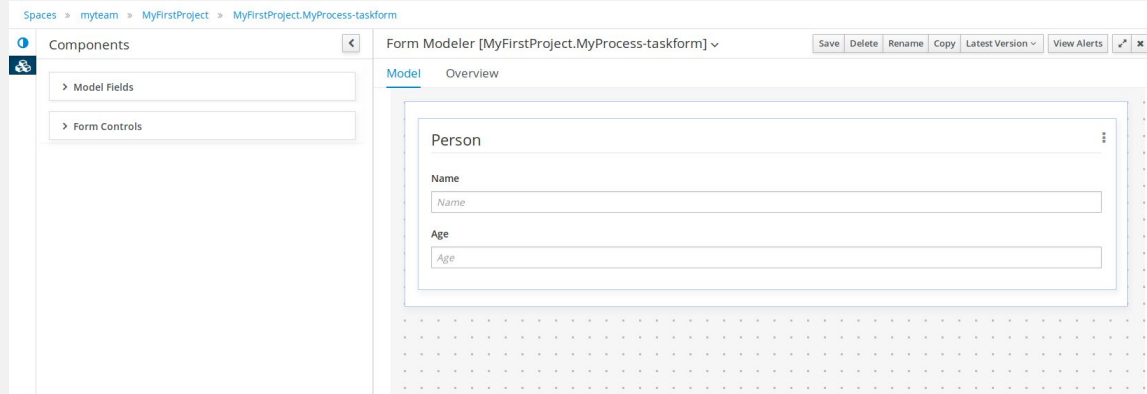
PROCESS MODELING

- ❑ Subset of BPMN2 elements
- ❑ Focus on execution semantics
- ❑ Form generating
- ❑ Export to PNG, PDF, SVG, BPMN2



FORM MODELING

- ❑ Generate forms for
 - ❑ Data Objects
 - ❑ Process start form
 - ❑ Task form
- ❑ Widget library able to bind different types of data (TextBox, DatePickers, Checkboxes, ListBox, Nested Forms...)



PROCESS ADMINISTRATION

- Quick access to:
 - Process Definitions
 - Process Instances
 - Tasks
 - Execution errors
 - Jobs
- Filtering

Home > Manage Process Instances

Filters

- State
 - Active
 - Aborted
 - Completed
 - Pending
 - Suspended
- Errors
 - With errors
 - Without errors

Filter By

Id

Filter By Process Instance Id...

Apply

Name

Select

Start Date

Start Date...

Last update

Last update...

Advanced Filters

Manage Process Instances

Active filters: State: Active X Save Filters | Clear All

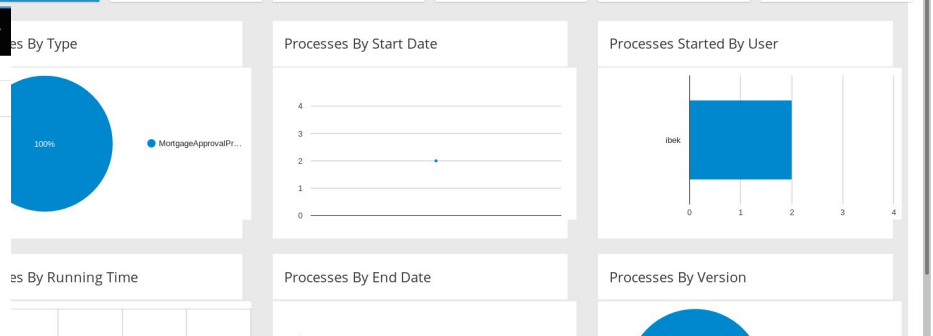
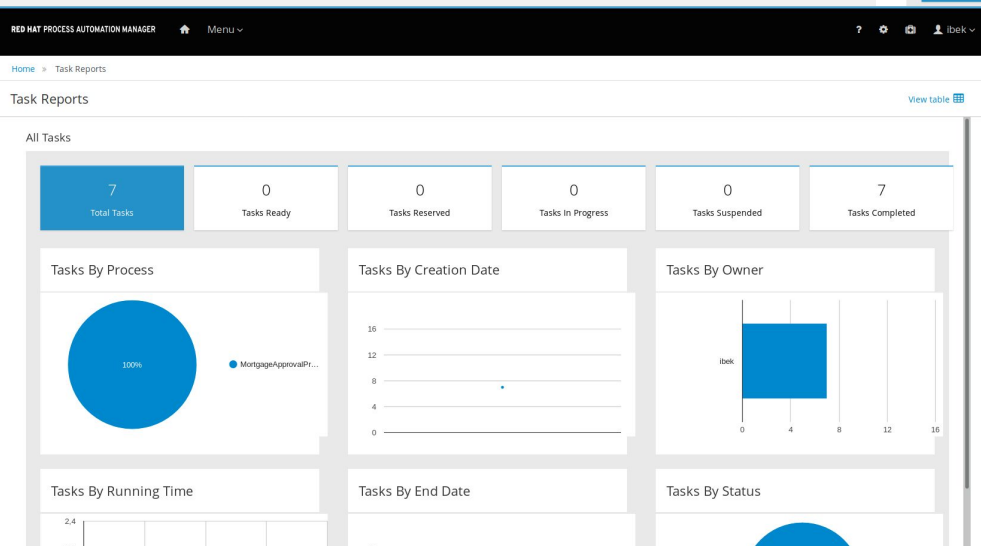
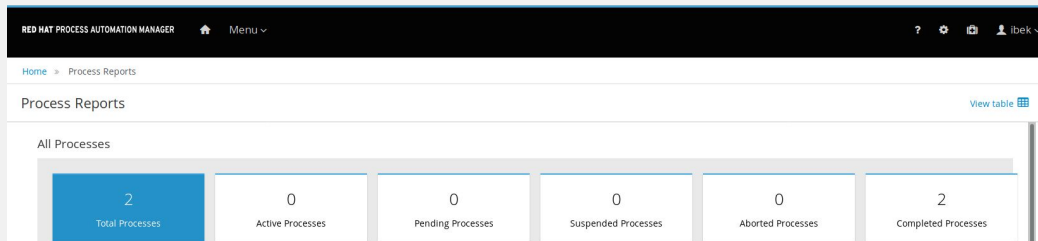
<input type="checkbox"/>	Id	Name	Description	Version	Last update	Errors	Actions
<input type="checkbox"/>	2	Evaluation	Evaluation	1	29-Mar-2018 12:58:57	0	⋮
<input type="checkbox"/>	1	Order for IT hardware	Order for IT hardware	1.0	29-Mar-2018 12:52:46	0	⋮

10 Items 1-2 of 2

New Process Instance

PROCESS MONITORING

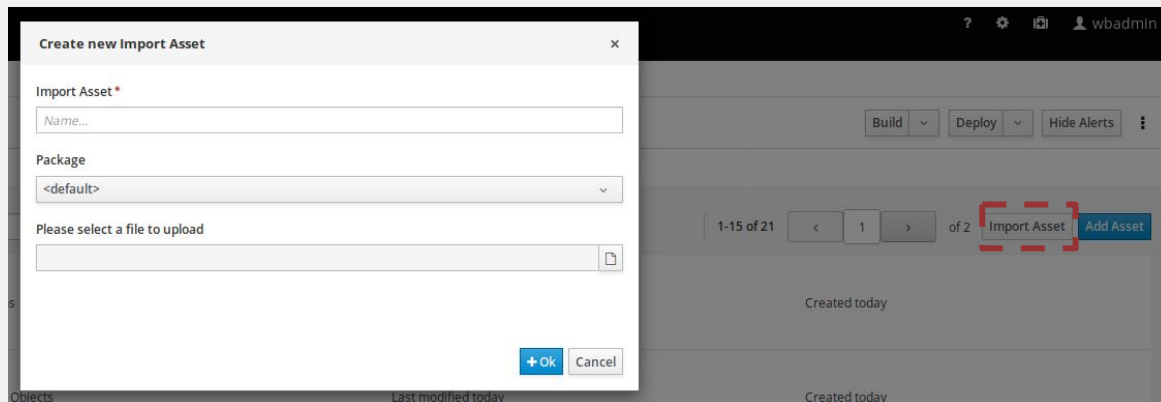
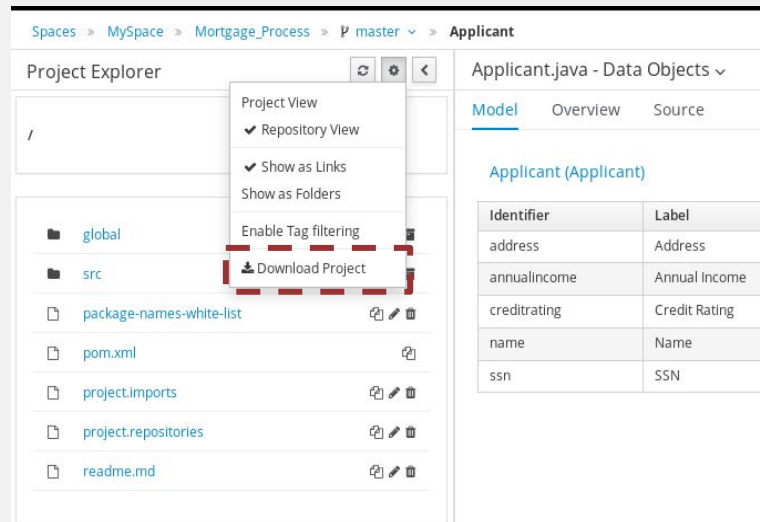
- Process reports
- Task reports



TEAM COLLABORATION

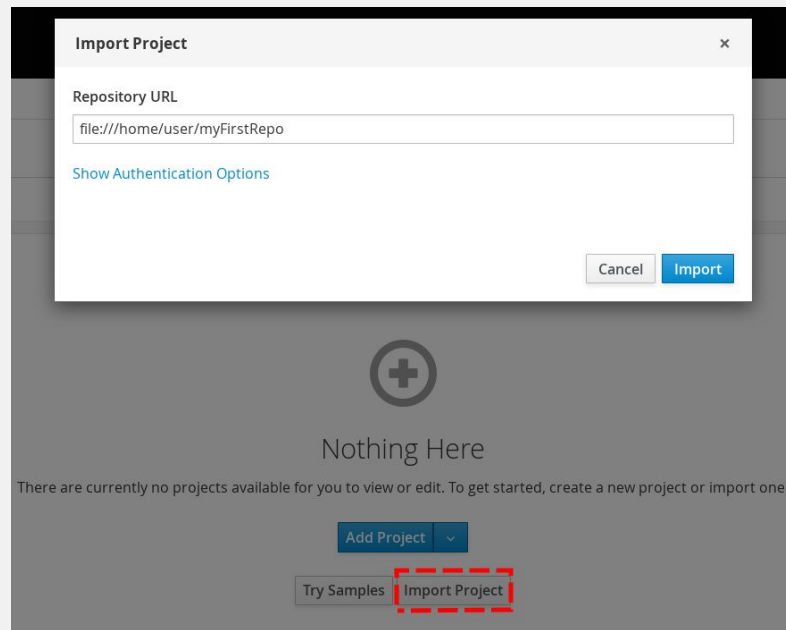
- How to work on a project as a team without any complex setup of the infrastructure (git hooks, central git repository, ...)

 1. Split the work between the team members
 2. Export project
 3. Share your assets with your team
 4. Import assets to your local instance



TEAM COLLABORATION VIA GIT

- ❑ Requires only basic Git skills
- ❑ Pull your business assets from Business Central
 1. `git remote add business-central ssh://wbadmin@localhost:8001/MySpace/<projectName>`
 2. `git pull business-central master`
 3. password wbadmin
- ❑ Push your business assets for example to GitHub
 1. `git push github master`
- ❑ Import your business assets to another Business Central either by pushing to it or by cloning whole repository from UI





THANK YOU



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facebook.com/redhatinc



linkedin.com/company/red-hat



twitter.com/RedHatNews



youtube.com/user/RedHatVideos

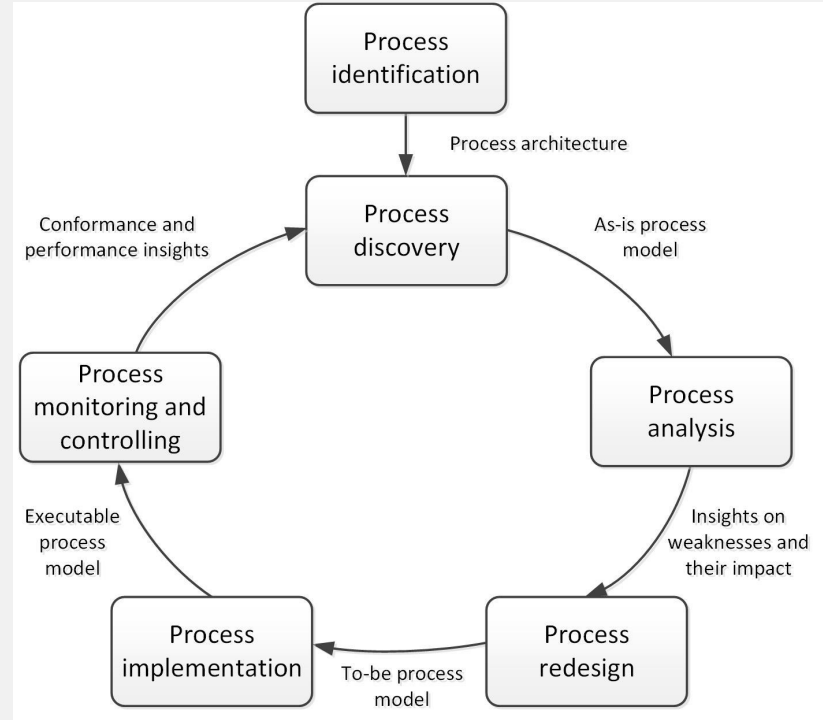
BUSINESS PROCESS MANAGEMENT

the way a company manages and improves business processes

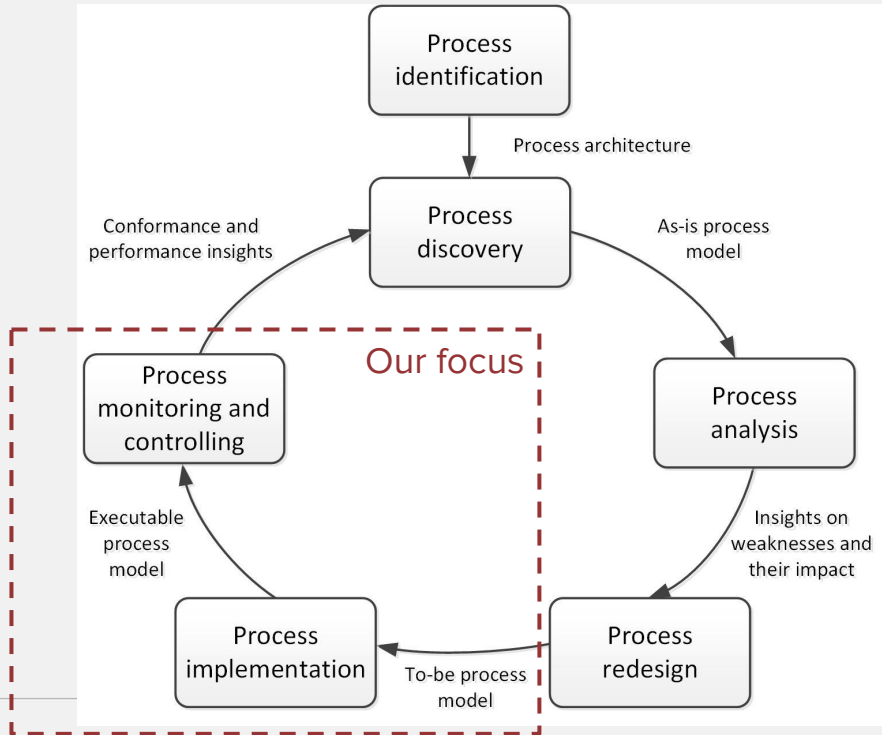
“A business process is a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer. A business process has a goal and is affected by events occurring in the external world or in other processes.”

Hammer, M. and Champy, J.

- approval process
- payment process
- employee onboarding
- loan/mortgage application
- Manufacturing / assembly line
- service requests
- rent car process
- vacation approval
- media publish process



RETURN ON INVESTMENTS (ROI)



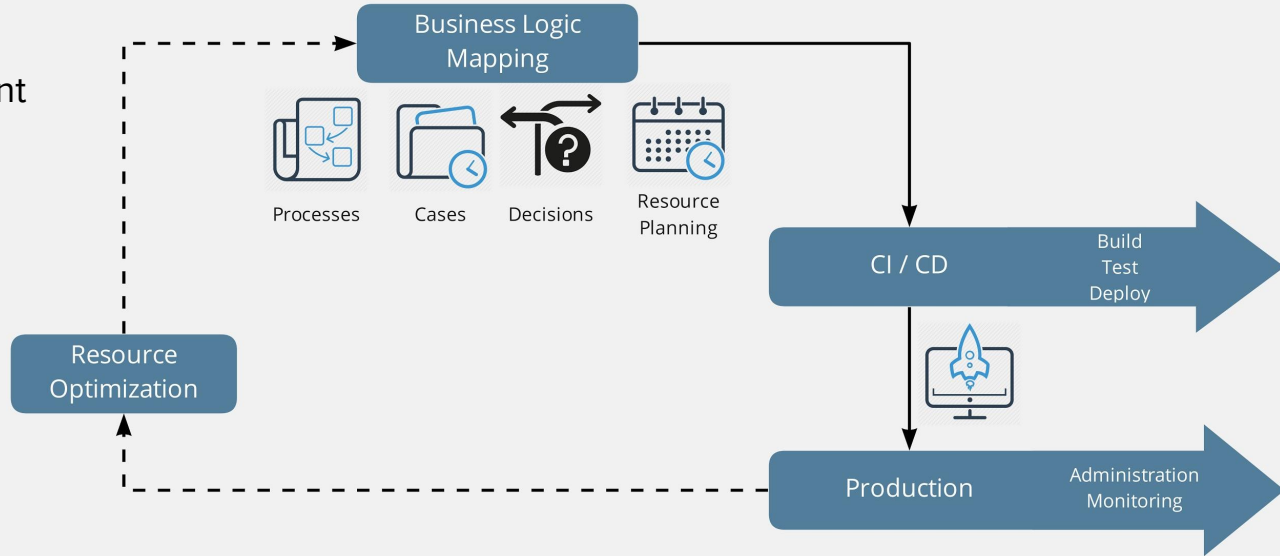
Frequency
Size and complexity
Diversity (actors, systems, rules)
Speed (SLAs)

Time (spent on a single manual task) x
Frequency (of performing a task per month) x
Cost (per hour) x 12 (months) = **Yearly Savings**

BUSINESS AUTOMATION

more than BPM

- ❑ BPM
- ❑ Decision Management
- ❑ Case Management
- ❑ Resource Planning
- ❑ Robotic Process Automation (RPA)
- ❑ AI, XAI, and Machine Learning



See BPM in context