Agenda

- The Opportunity
- What is a Smart Connected Object?
- How to integrate an Object in a Process?
- Proof of concept: Sharing Lockers
What could be the place of BPM in the IoT area?

The Opportunity
Figures from the future

2 020
8 000 000 000
9 200 000 000
80 000 000 000
Figures from the future

2 020  The year ;-)  
8 000 000 000  Population  
9 200 000 000  Mobiles  
80 000 000 000  Connected Objects
What we should expect

- In 2020: 10 times more connected objects than mobiles or people
- Objects will impact IT approach and push the boundaries of BPM projects
- BPM of Things is a new market to discover
What is a Smart Connected Object?

Connected Objects seems trendy but...
Basic features of a connected object

- **Actuator**: Acts on real world
- **Sensor**: Transforms events into data
- **Connectivity**: Connects to external systems
- **Logic**: Defines object’s behavior

©2014 Bonitasoft
Smart connected object

Object

- Logic
- Connectivity

Provides additional logic
Provides data

External Information System

Sensor
Actuator

©2014 Bonitasoft
Well, I have an object… What can I do now?

How to integrate an Object in a Process?
Integration Requirements

Expose BPMN events to Object

• Allows process to react to object’s events
• Allows to process object’s sensor data

Expose an API to interact with Object

• Allows to pilot object’s logic
• Allows to trigger object’s actuators
A new User Experience for your processes?

Replace web based User Experience by a dedicated object to perform tasks…

- A real innovative opportunity for all business processes with Human tasks
A proof of concept
Sharing Lockers
Sharing Lockers Concept

Smart lockers to securely exchange things between people

• Prevents agenda issue while delivering packages
PoC Technical Components

Bonita BPM
Ready for smart applications

RaspberryPi
Object’s controller

NodeRed
Object’s logic programming interface

PostgreSQL
Business data persistence
The Object
Inside the Object

RaspberryPi

NodeRed
The Bonita BPM Process
Bonita BPM / Object Communication

Bonita BPM

Sharing Locker Process

REST Connectors

BPMN Message Event

Bonita REST API

Calls Object’s logic

Sends BPMN message
PoC effort in figures

- Days of works: 2
- Developers: 3
- Hardware cost: < 100 €
- Software cost: 0 €

Successful implementation with limited investment in terms of resources
Conclusion

Connected Objects will become a part of our life

New ways to monitor and act will appear

Smart connected objects will empower User Experience by replacing classic applications
Thank you, and…

STAY CONNECTED WITH US!

www.bonitasoft.com
CORPORATE WEBSITE
Product & Services descriptions,
References, Webinars, White papers

www.bonitasoft.org
OPEN SOURCE COMMUNITY
Forums, Contributions, Source Code

©2014 Bonitasoft