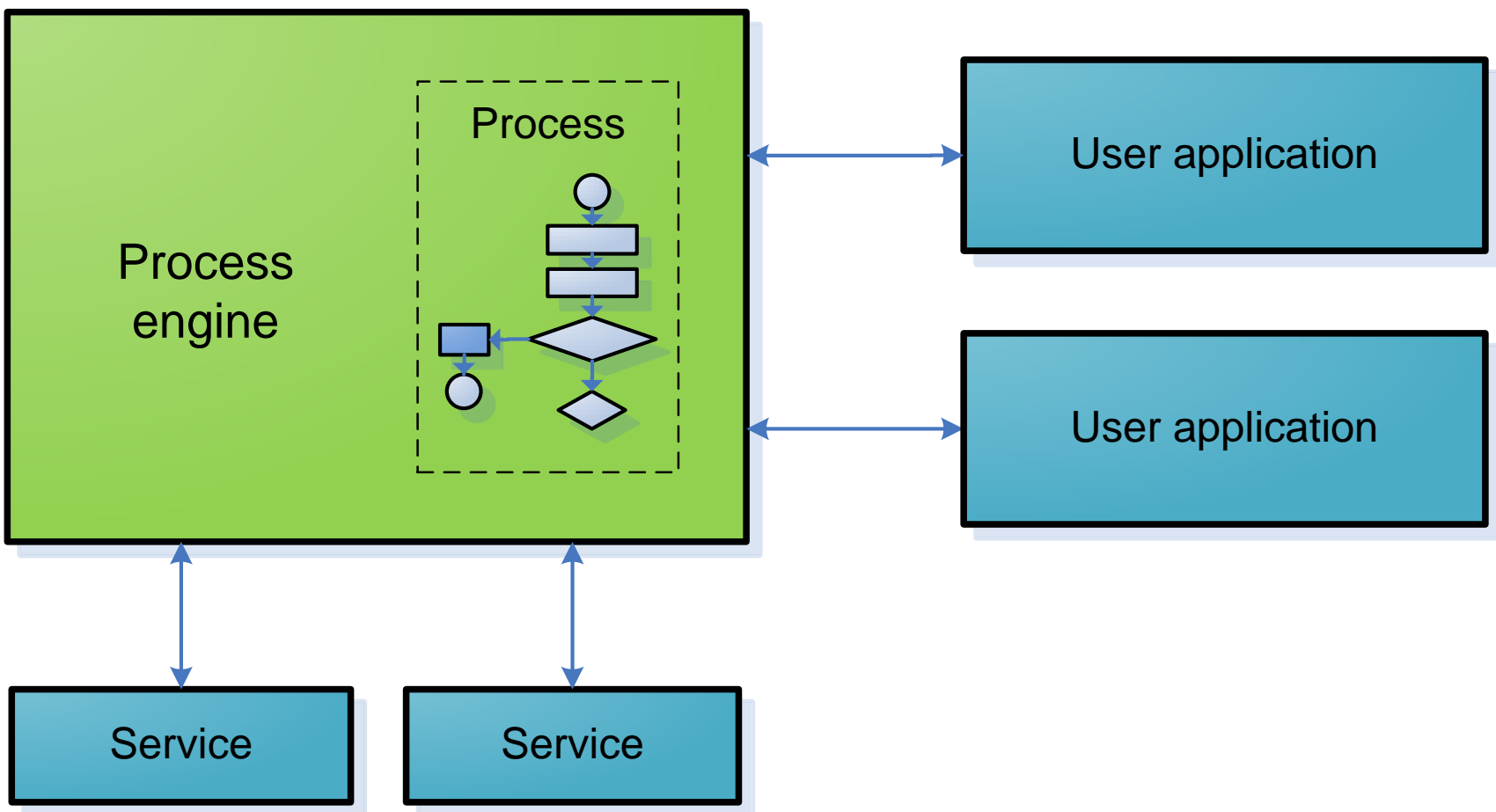


Business Processes and Human Interaction

Mario Aparicio
(Tor Arne Kvaløy)

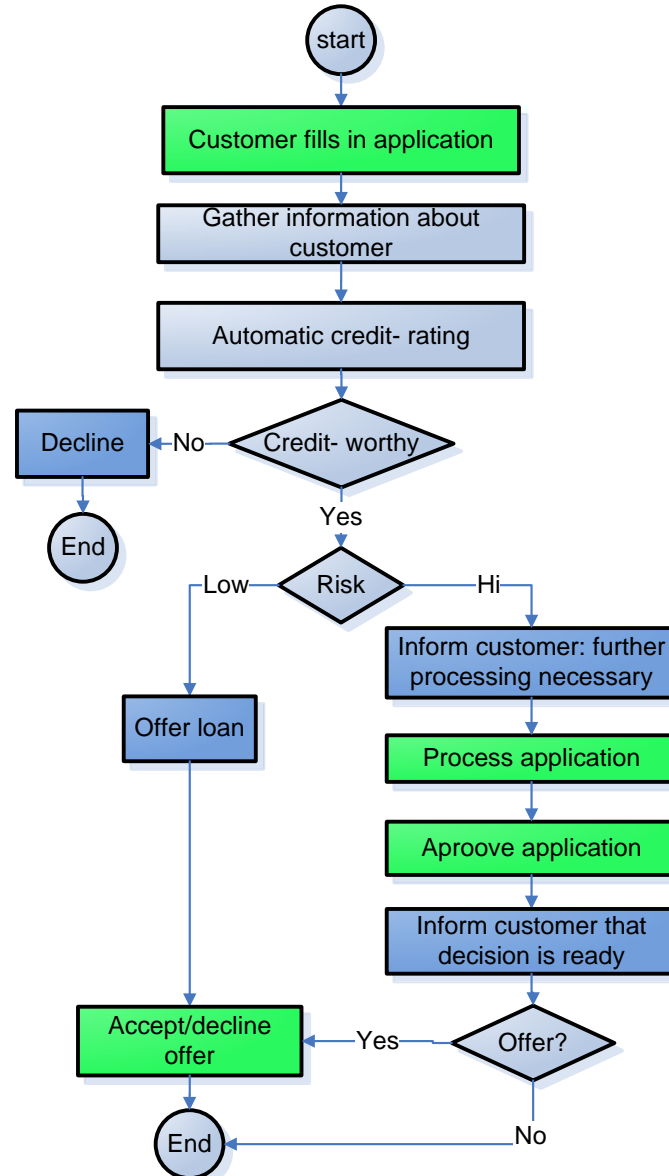
The message



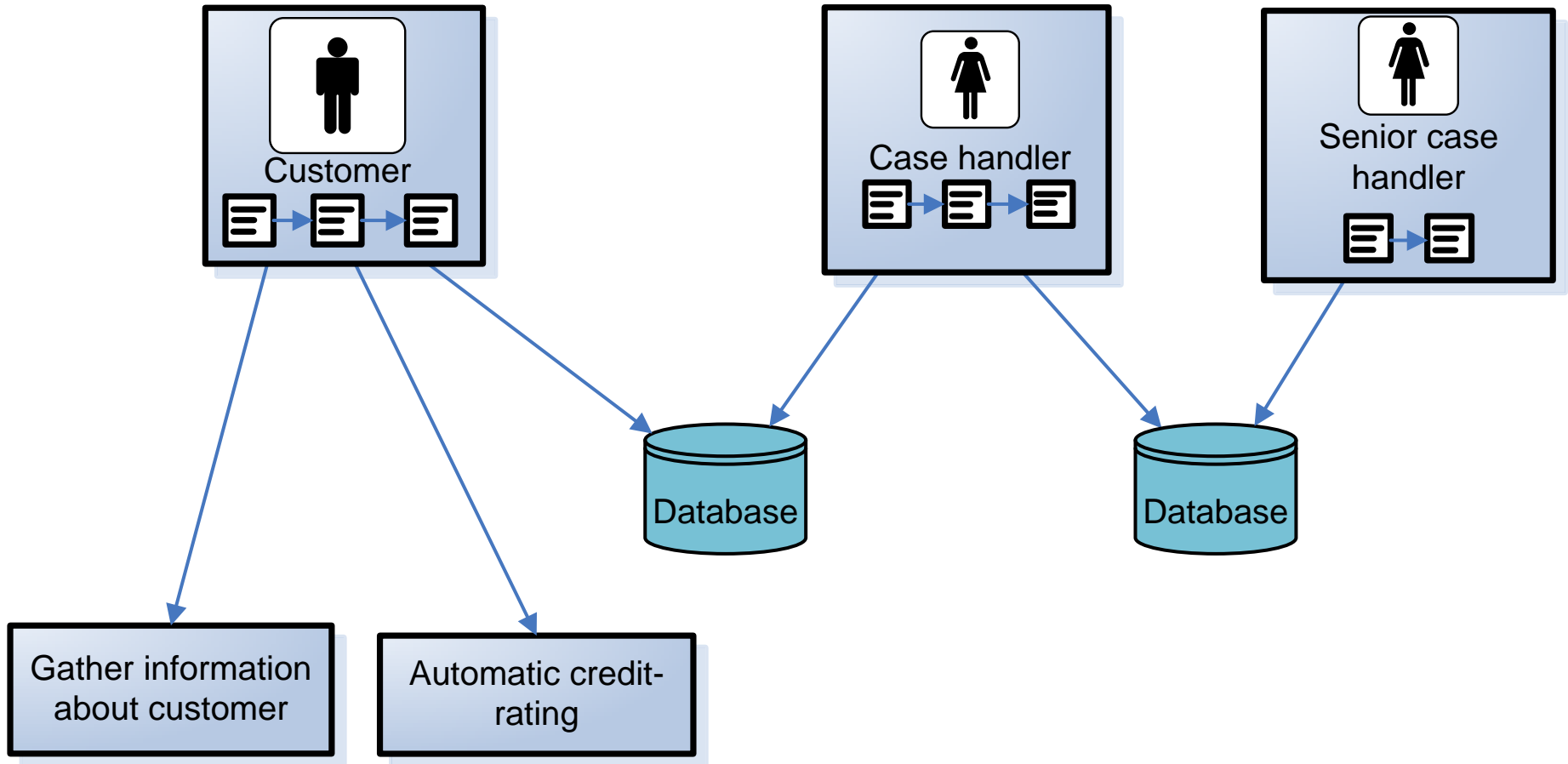
What's in it for you?

- Learn about processes and human interaction
- That it is possible to make use of business process management software in a user application
- How to do this
- Suggestions on when it is a good idea to do this

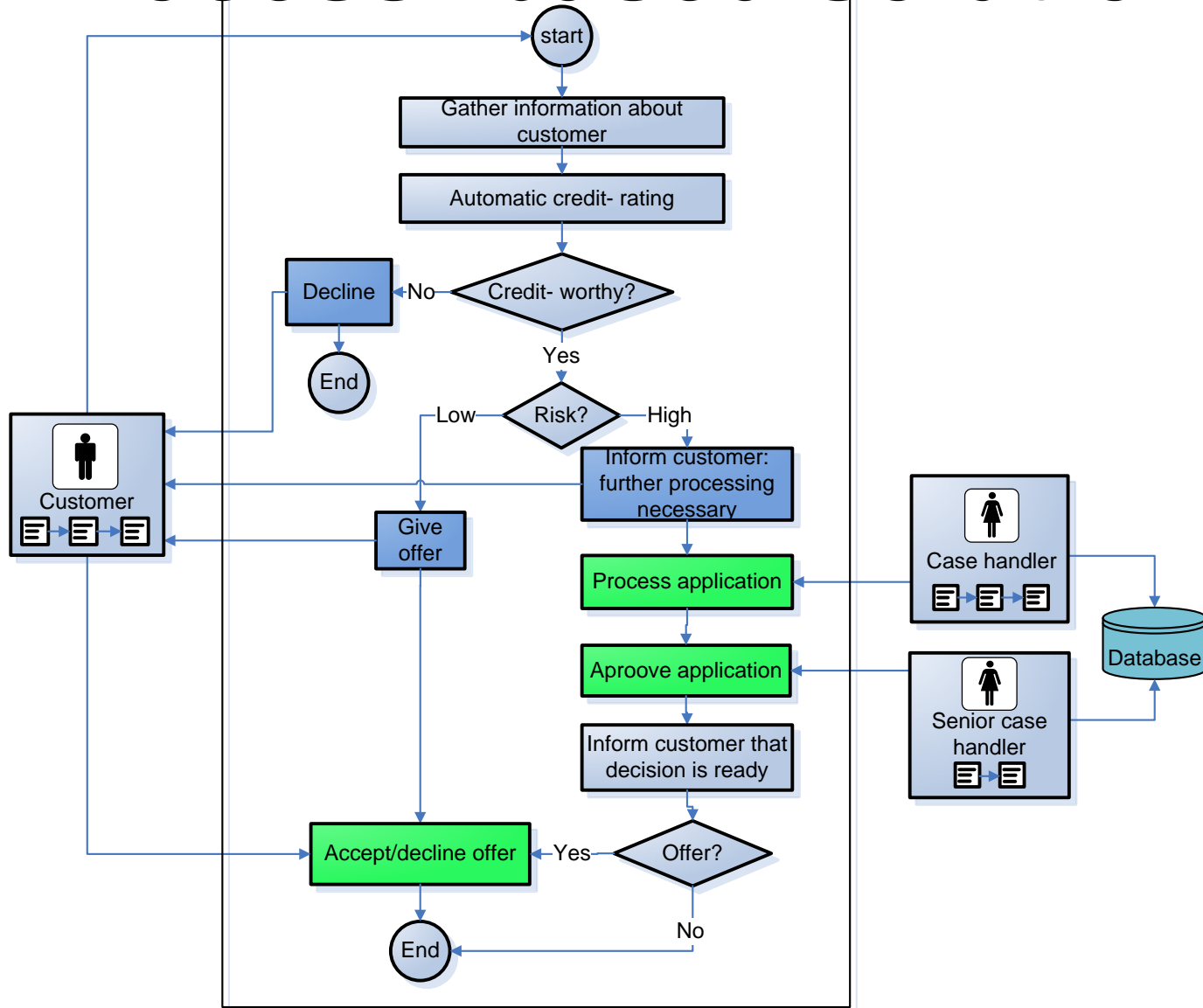
Loan application - overview



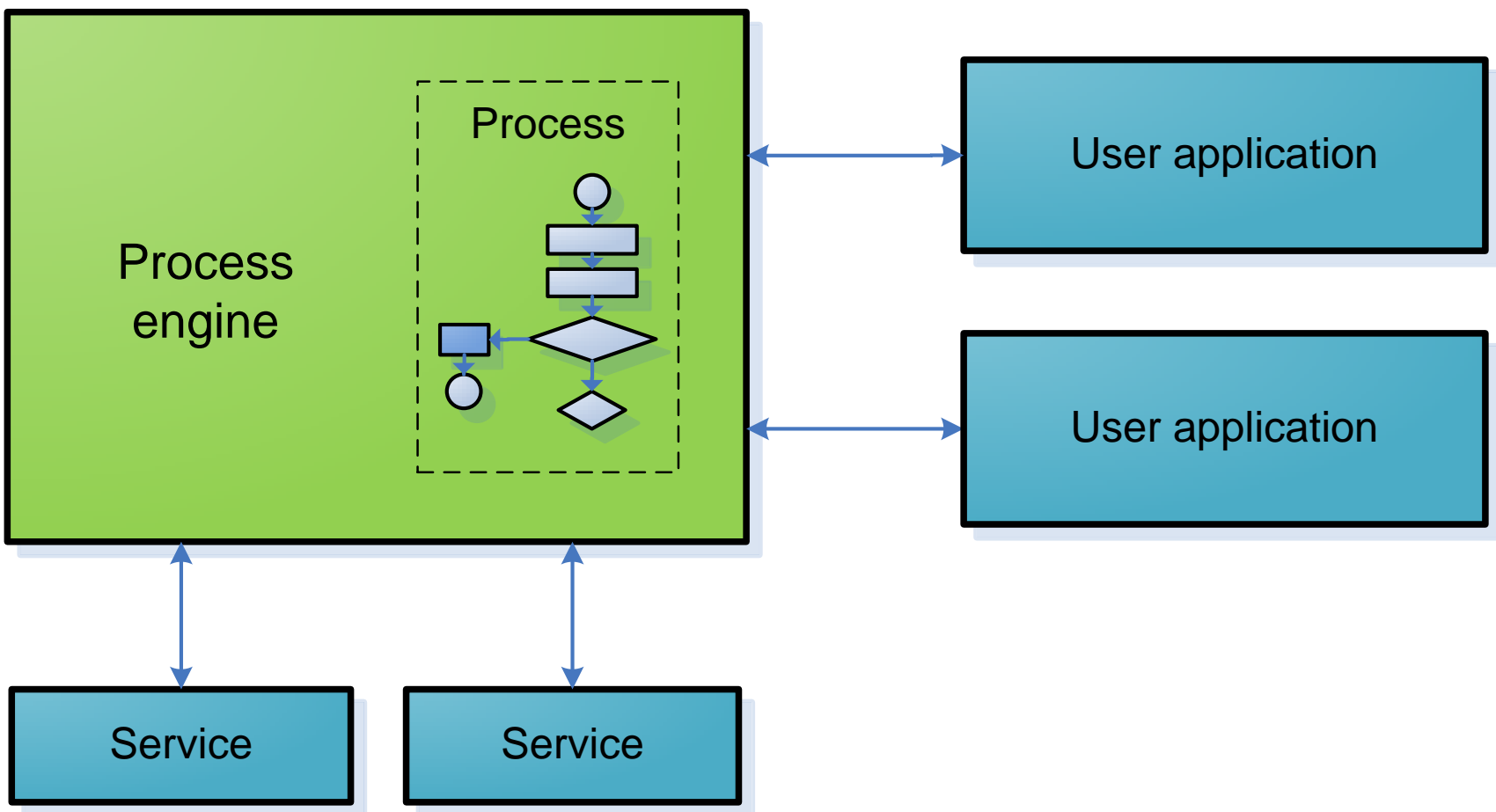
Standard client/server solution



Process- based solution

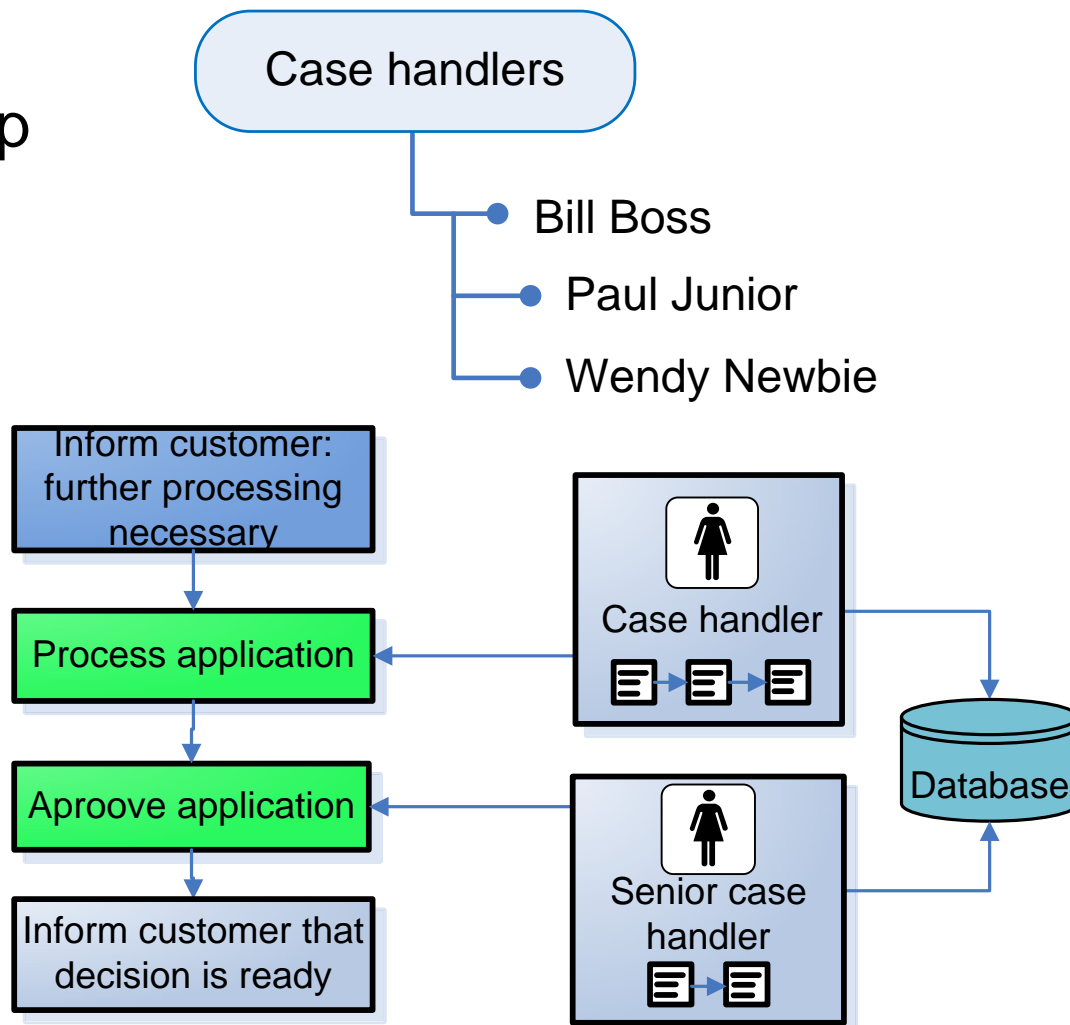


Process engine



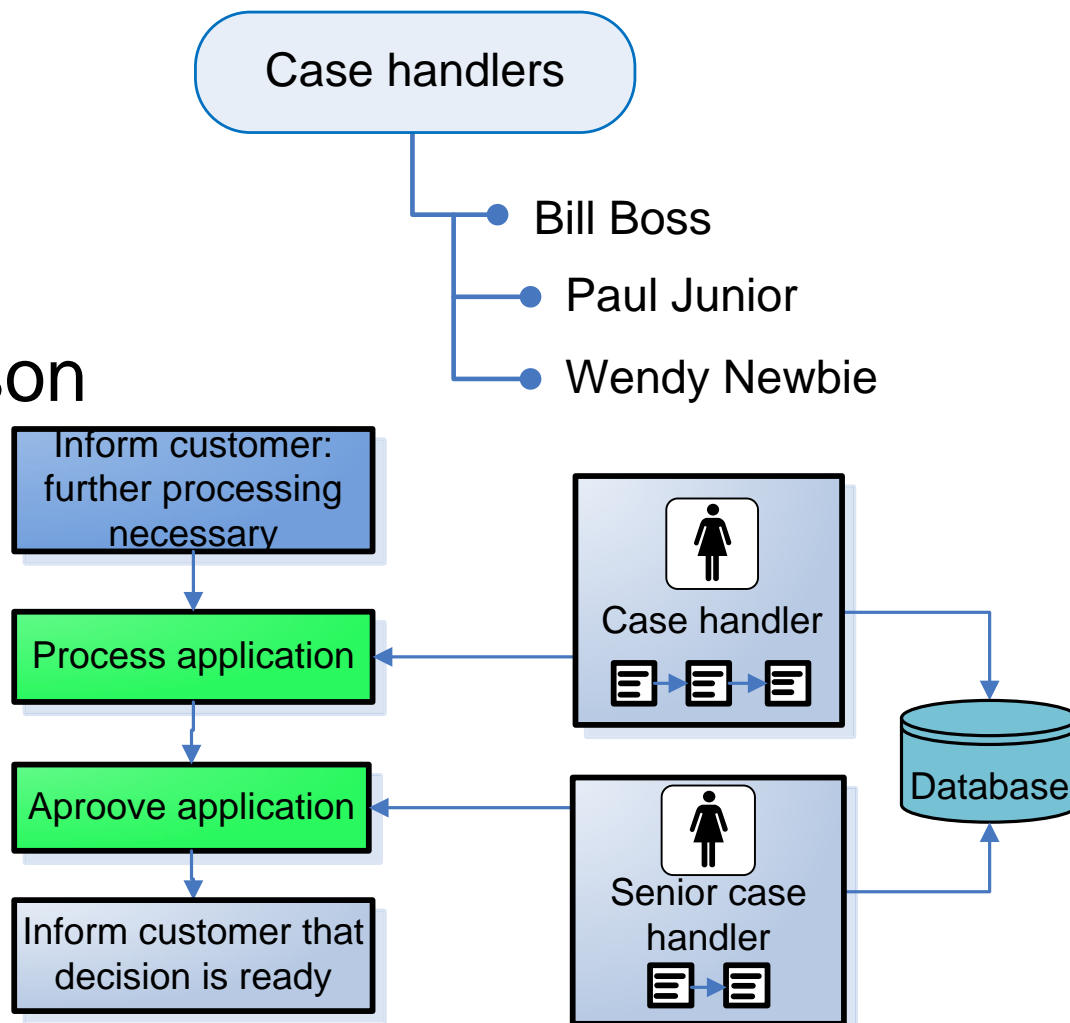
Human interaction steps

- Person and/or group
 - LDAP
- Worklist API
- Tasks and states
 - Available
 - Checked out
- Task- info
 - Creation time
 - Check- out time
 - Priority
 - Deadline



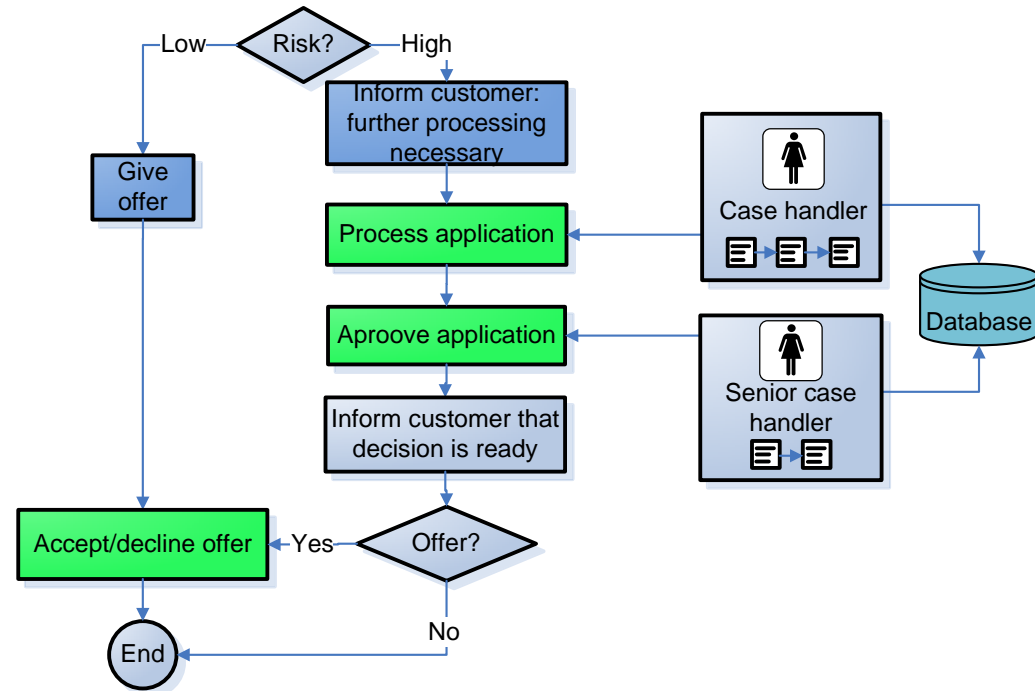
Escalation

- Timebased
- Escalation
 - to grup or person
 - send email notifications



Responsability and data

- Process
 - flow and state
 - what and when
- Application
 - How
 - Business rules
 - domain data
- Process needs some information from app.
 - Controlling the process
 - Giving the right messages to the applications



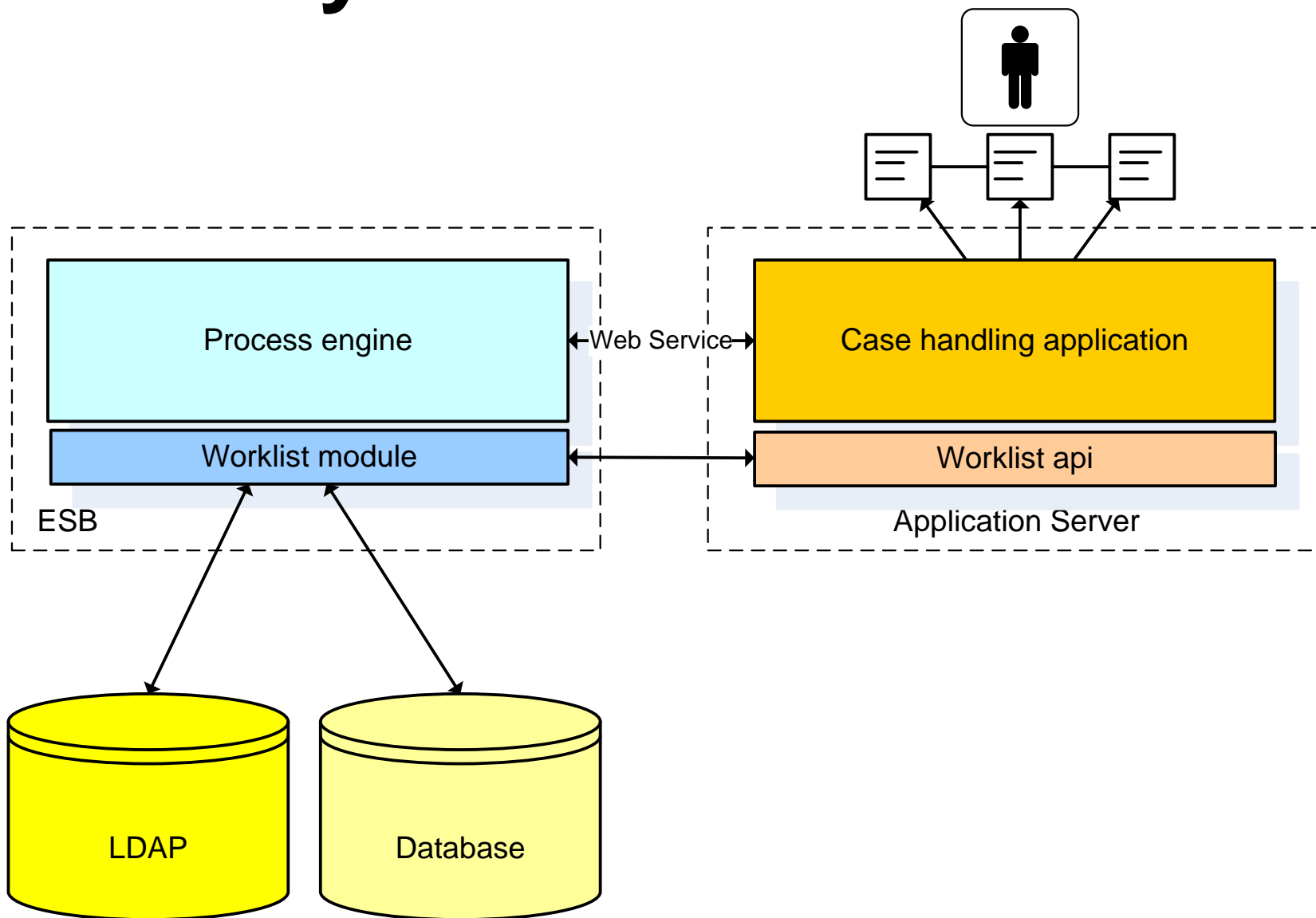
Pros and cons

- Pros
 - Centralized control of flow and state of the business process
 - More flexible business process
 - Integration with other systems is easier
 - Visual model of the real world business process
 - Attain information about ongoing business processes (BAM)
 - Can make the applications more statless
- Cons
 - Higher complexity in the beginning
 - New technology
 - Have to rely on the process engine to get the applications to work.

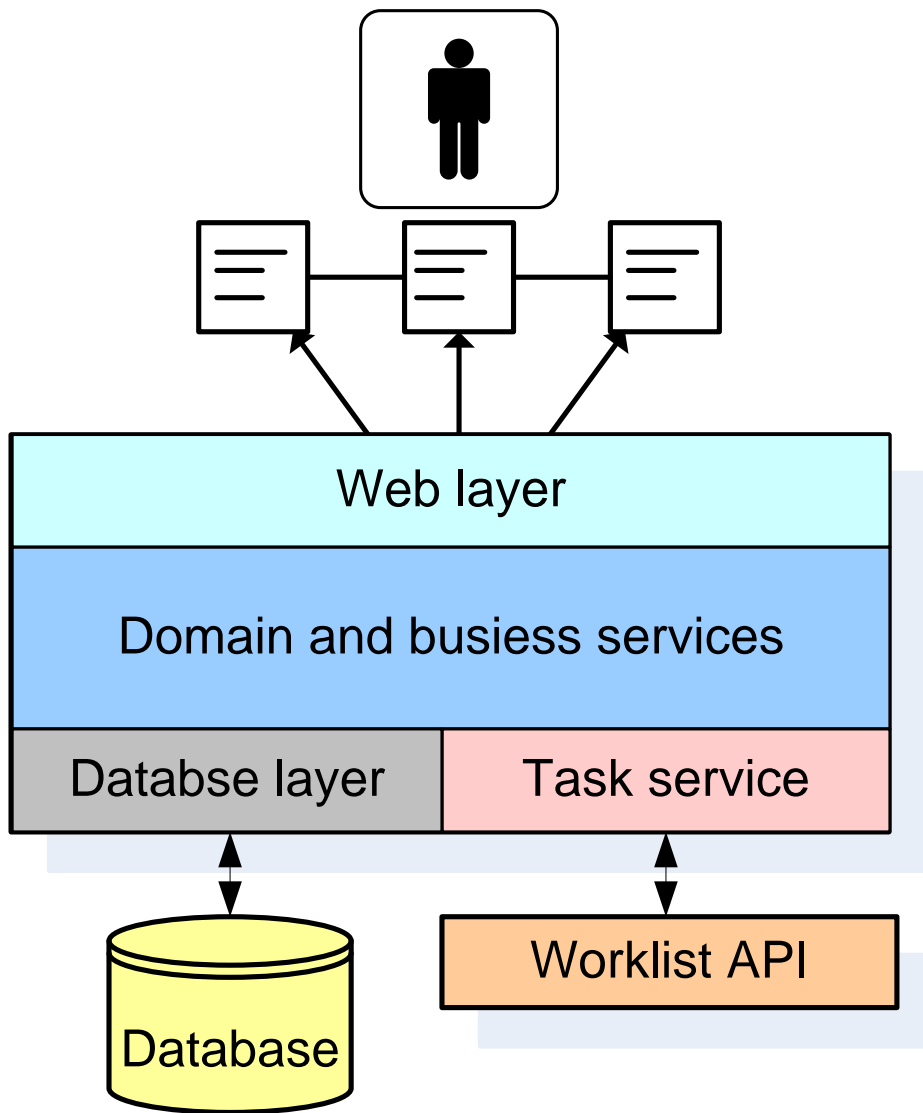
When and when not to use?

- When to use
 - Multiple systems
 - Multiple human steps/interactions
 - Complex business processes
 - Processes that change often
- When not to use
 - Small and simple systems
 - Real- time systems
 - Stateless systems

System architecture



Application architecture

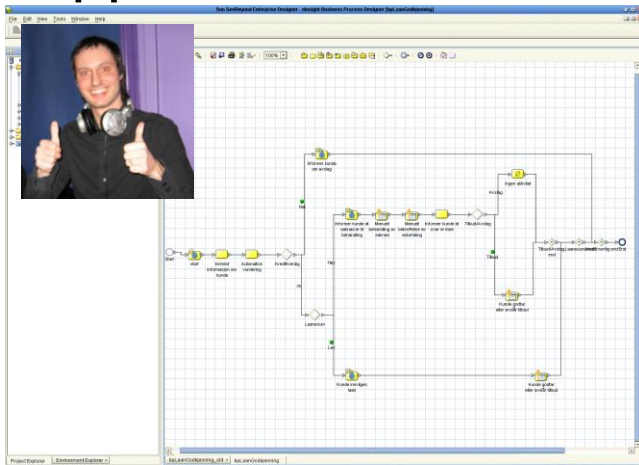


Challenges and solutions

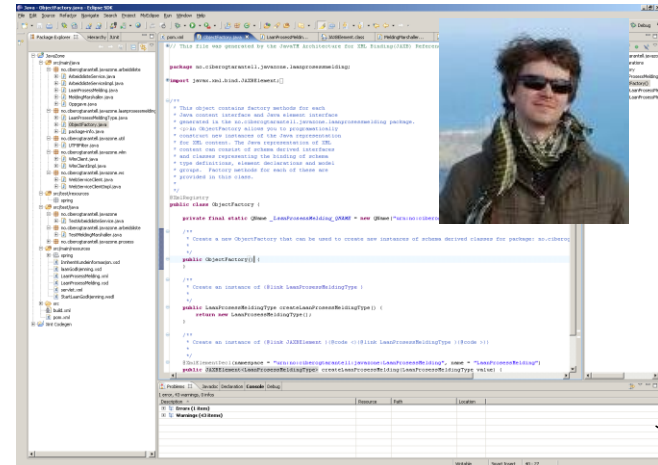
- Development and deployment
- Upgrading the process
- Business process granularity vs. human tasks
- Testing
- Integration with user- applications
- Vendor lock in

Development and deployment

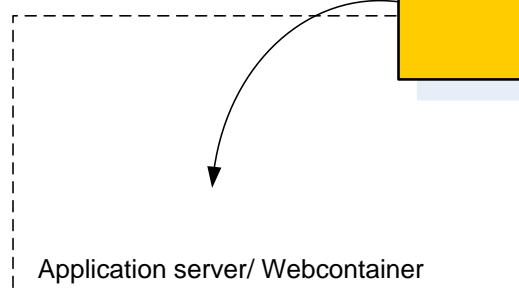
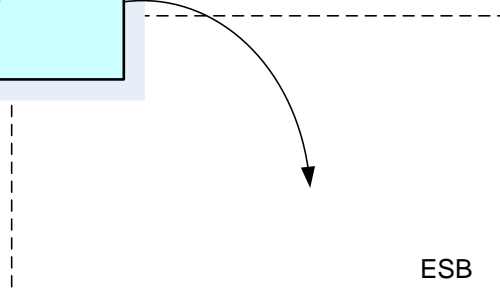
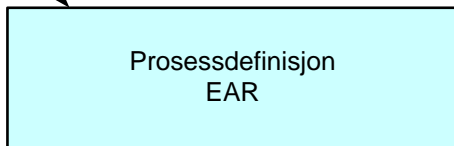
- The process is developed separate from the Web-application



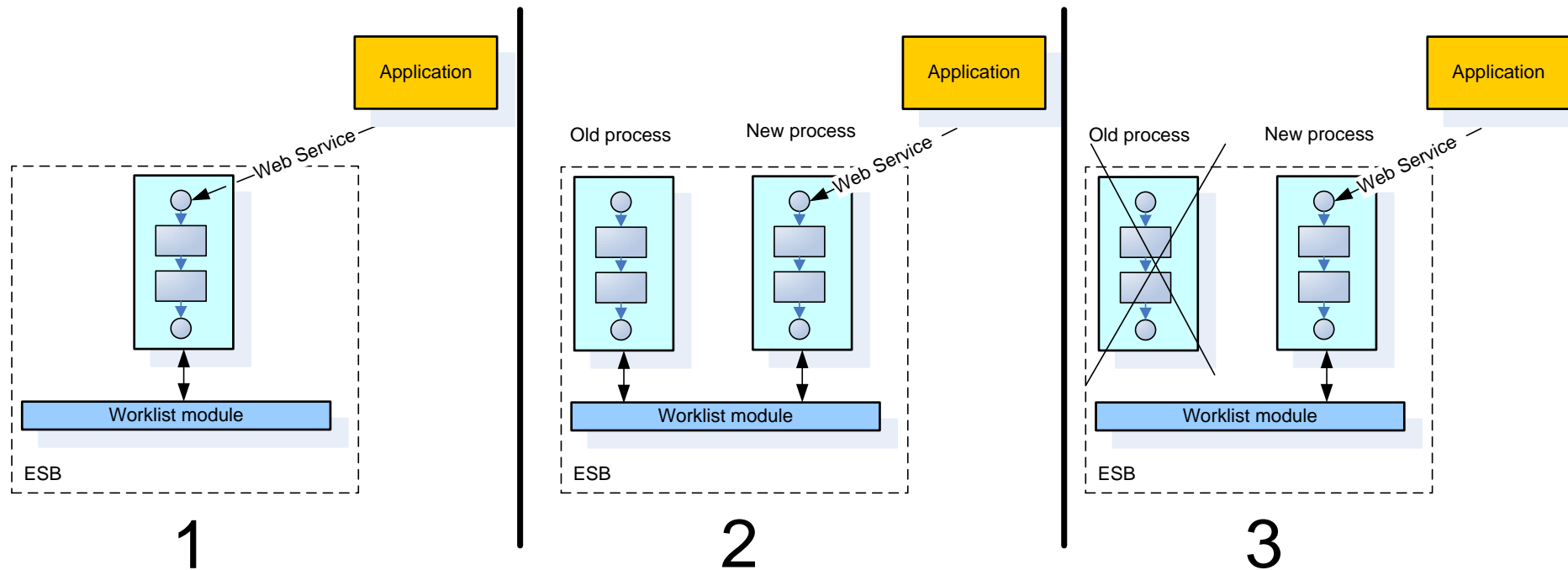
JCAPS Enterprise Designer



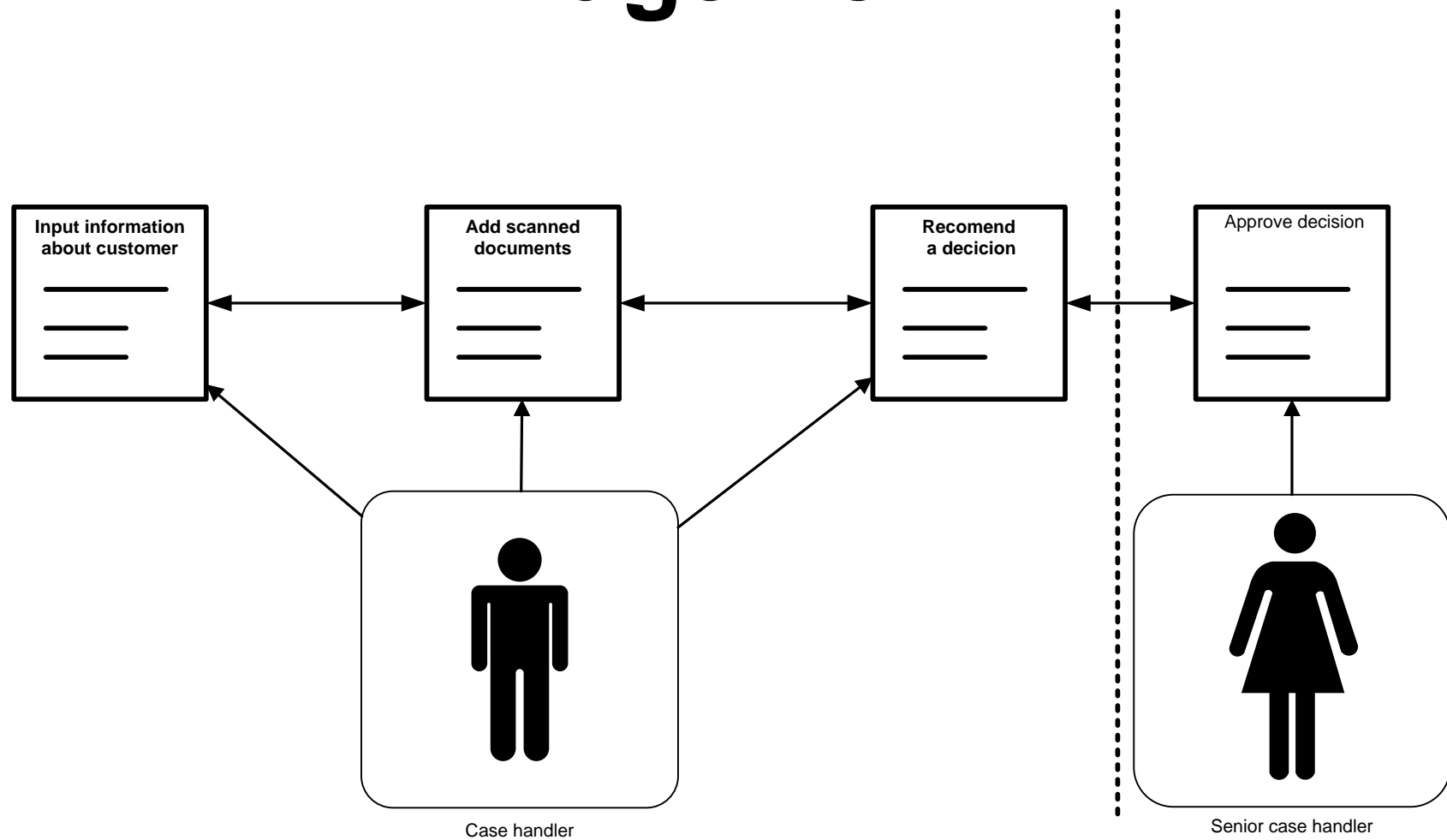
Eclipse og Maven



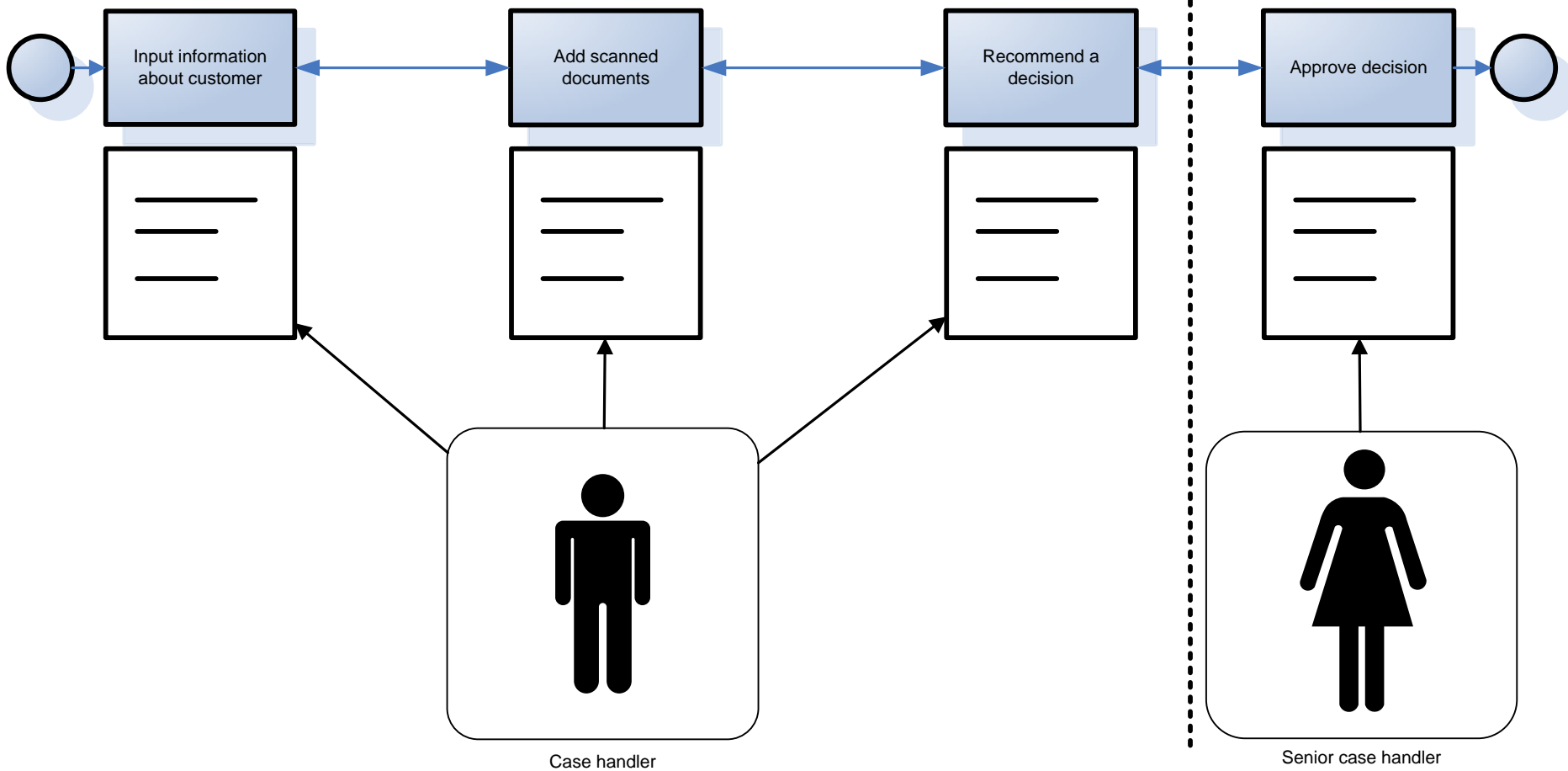
Upgrading the process



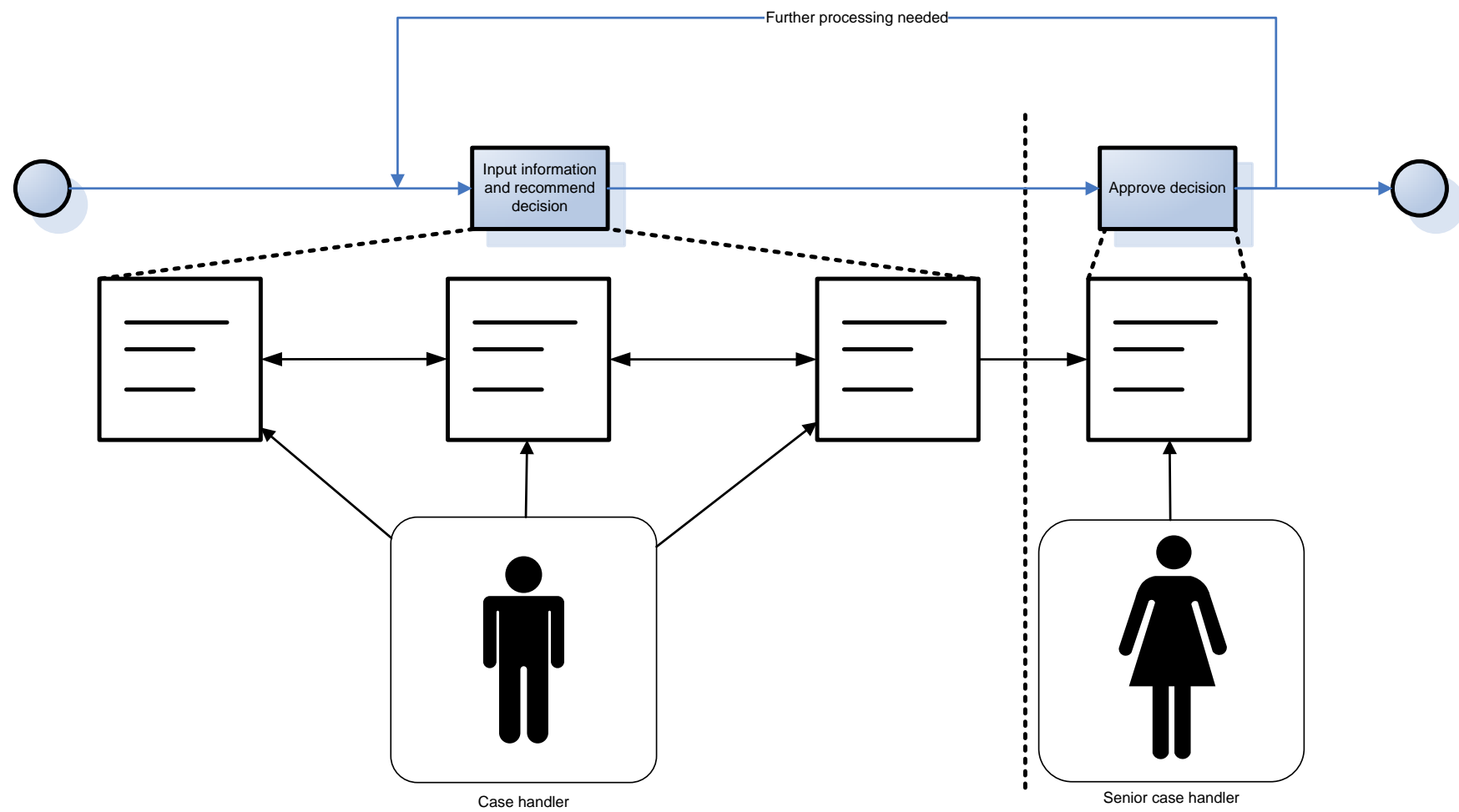
Page flow



Process = page flow



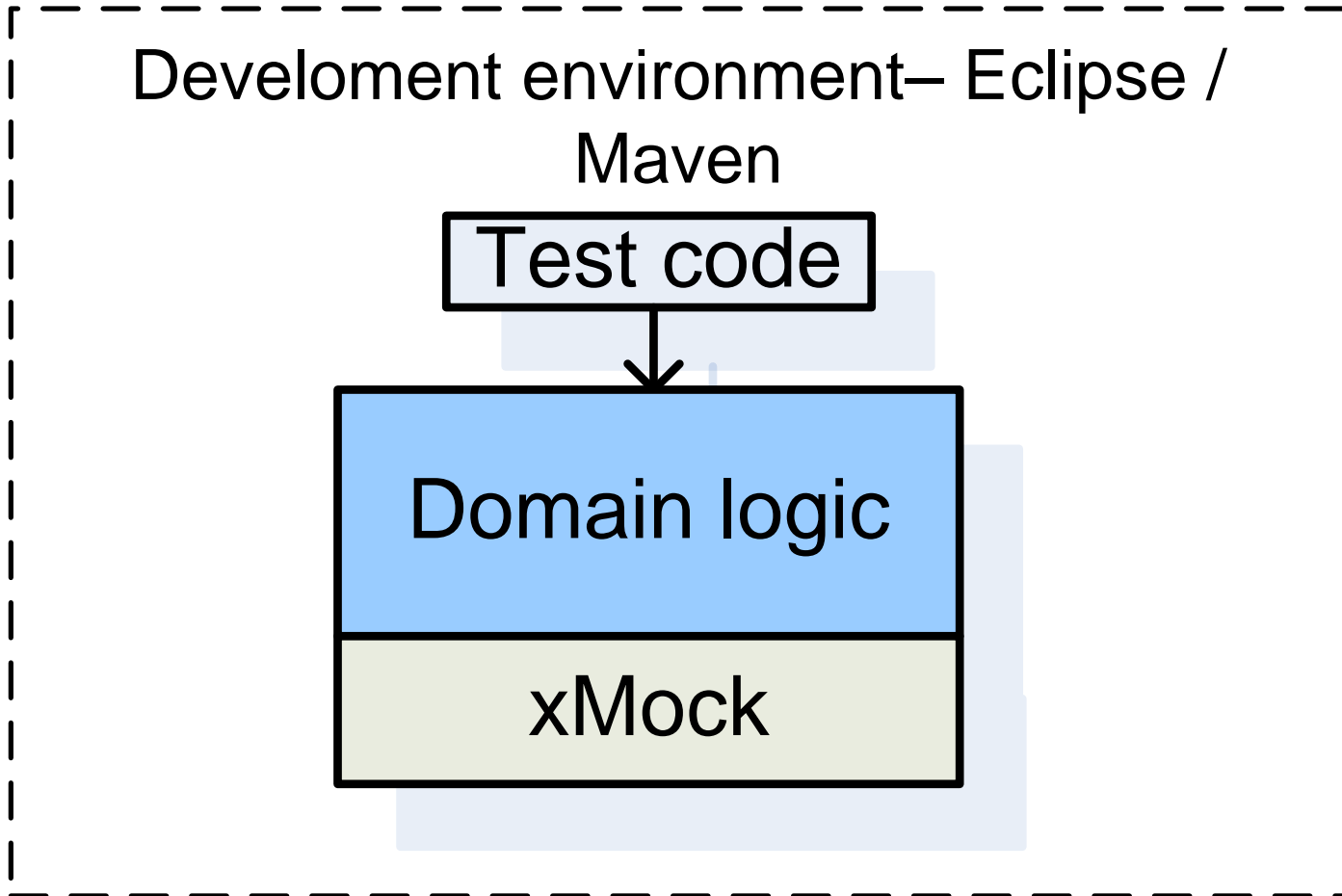
Process ≠ page flow



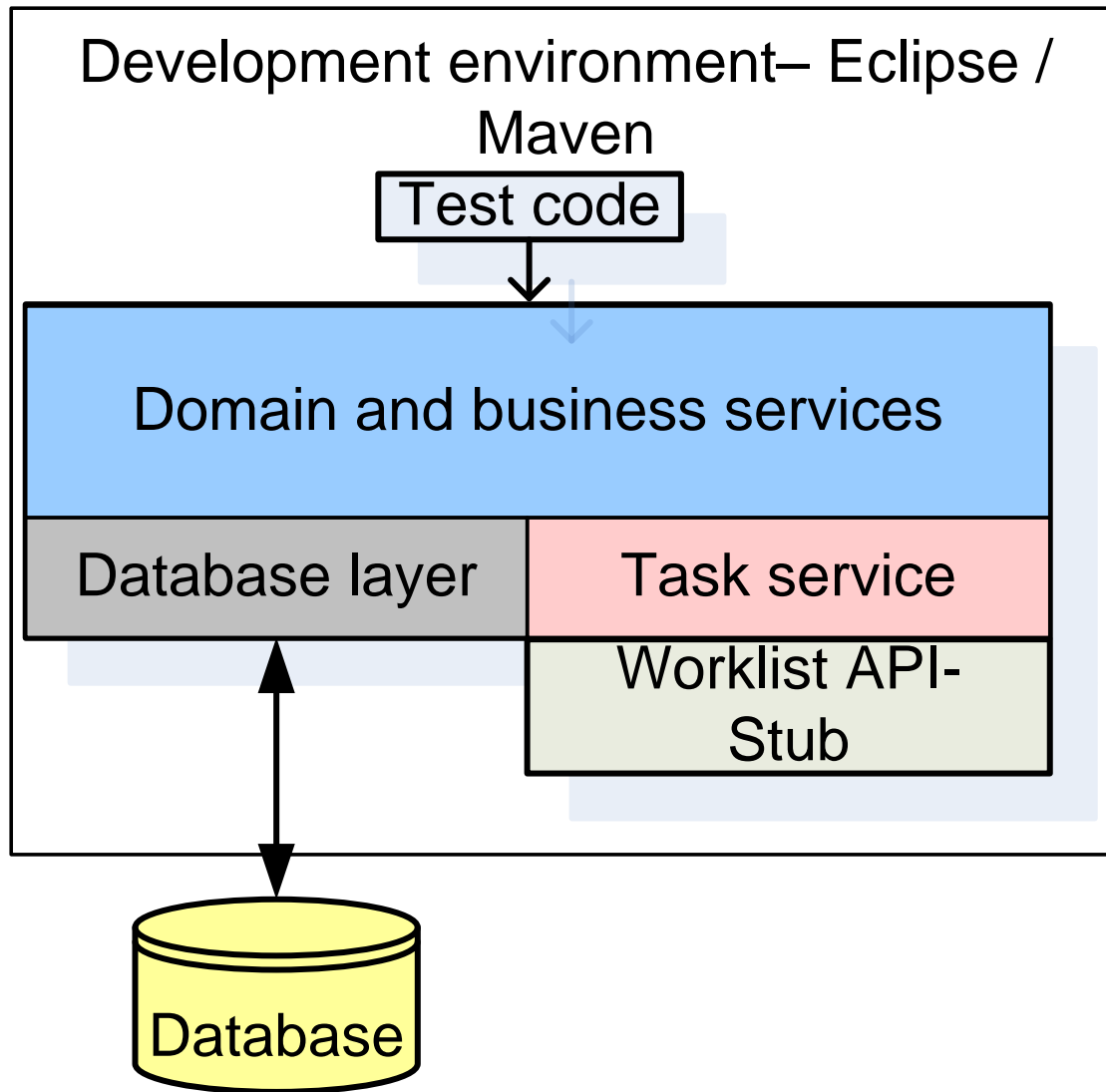
Testing

- Problem:
 - In container- testing
 - Requires:
 - ESB-server
 - Webcontainer
 - database
 - LDAP
 - Eclipse and Enterprise Designer
- Løsning:
 - Develop and test the application separate from the business process

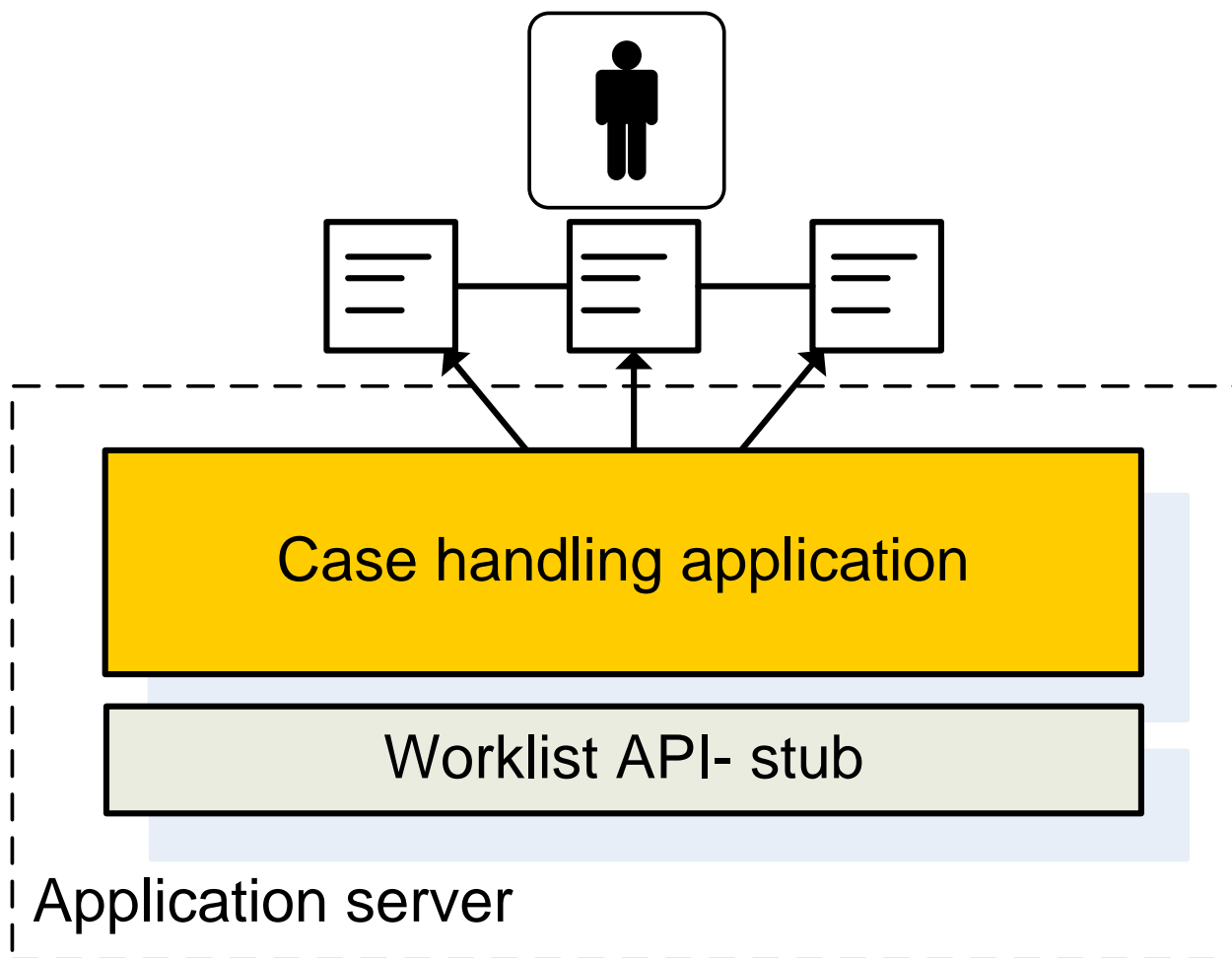
Unit testing



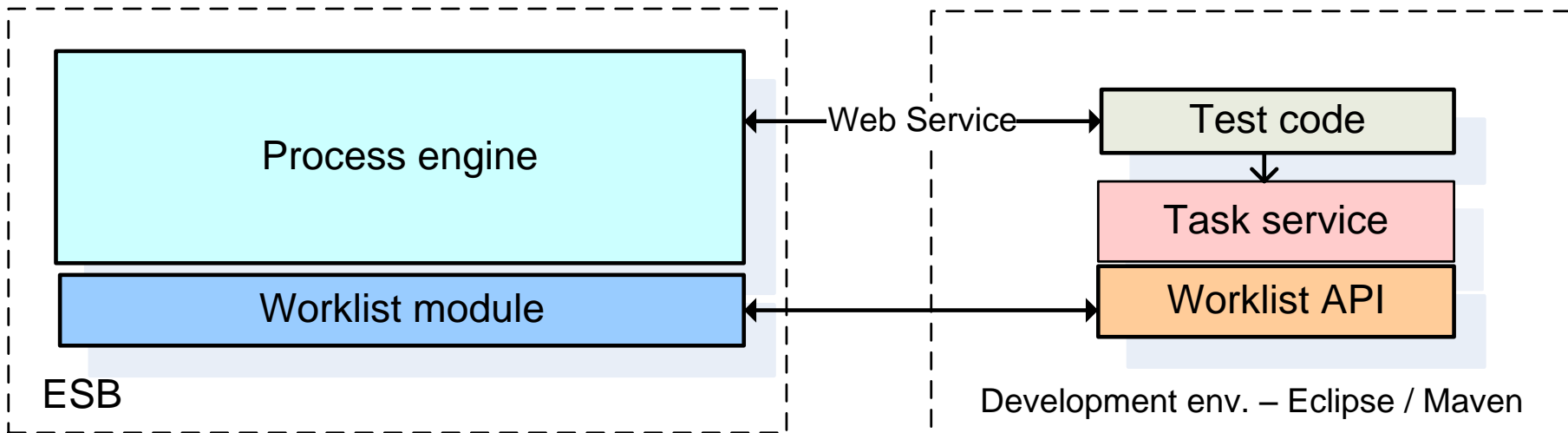
Integration testing



User interface testing

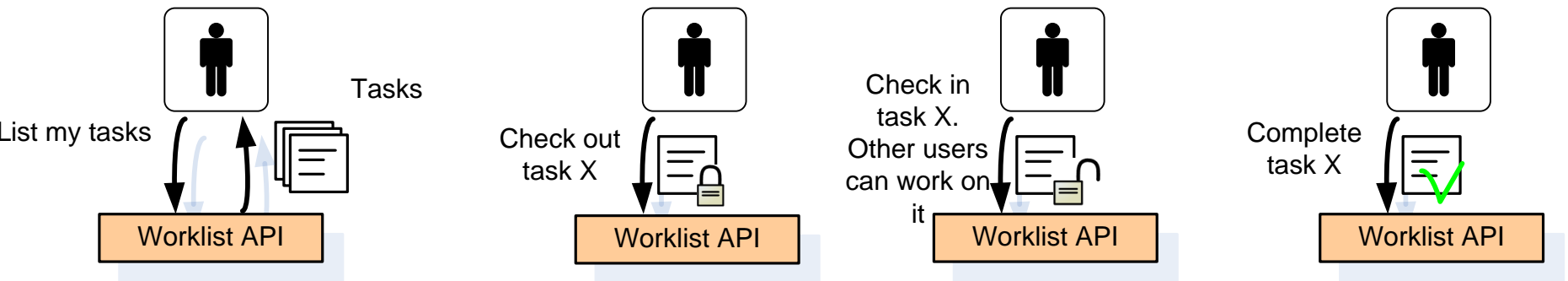


Testing the business process



Integrating with the web application

- Worklist API



- "Direct access" API

Vendor lock in?



Demo

- Process implemented with Sun JavaCAPS
- Application
 - Standard Java Web application
 - JSF
- Work List Manager API
 - Part of Sun JavaCAPS

Custom made Human Task API

- You can develop your own "Human Task API". Just need some way to communicate asynchronously with the application.

