Digitalization at the Swiss Intellectual Property Office

Project ESV
Generic Plattform for Trademark, Design and Patent Business Applications/Processes

... business driven architecture

... excellence ability for change

... cost-saving by usage of “best of breed” technology

Source: camunda.com
Real Szenario in IP

- Application registration
- Initial examination
- Formal examination
- Fast track
- Examination
- Approval
- Registration
- Cancellation

Emails/Briefe
ESV Challenges
… executable Processes

„Mein Prozessmodell ist technisch ausführbar! Toll, oder?“

Source: Praxiskurs BPMN camunda.com
ESV Challenges

... 20+ Systems to integrate
ESV basic concept
Adaptive BPM

BPM

Adaptive BPM

ACM

structured
simple

unstructured
complex
ESV basic concept

business Layers

**Presentation Layer**
Operational concept

**Structured BPMN Processes**
(Tasks)

**Layer Adaptive BPM**
BPMN metaprocess

**Security Layer**
Business Data

External events: deadlines, time-limits, mail+email, fees, ...

Business Data
Business Applications
ESV basic concept

business rules

- Processes
  - Business Objects
    - Deadline, Timelimit, ...
  - Mail, Email, ...
  - User

- Business Rules
  - validation user input, validation processes/objects

- Automatisation

- User assistance
ESV basic concept
automated document creation

Templates and corporate Design

Document creation

業務 Objects

Content

user

document

register extract

payment
ESV basic concept
Integration of existing Systems

- Business Rule Management
- Batch Processing
- Finance (IFRS) and Reporting
- Intelligence Business (BI)
- Corporate Search

- camunda
- ABBYY
- docucom
- officeatwork
- Fabasoft

Real-Time Monitoring
ESV Implementation
Integration via processes

- No usage of an Enterprise Service Bus
- Reduction of Implementation and operational costs
- Central and real time monitoring via Camunda
A real process example

«Trademark examination»
A real example
«Trademark examination»

... the bpmn processes are business readable and not technical workflows

... the bpmn processes do not contain business rules

... the processes are defined with a toolbox of predefined global processes (called activities) and the implementation time is short

... integration of other systems is done via processes e.g. SAP is integrated via Camunda.

... processes run for a short time only and are highly configurable. Workflow, Documents, Content of Documents, Service times, Output channels... are configurable via xml
Global Task Management with extended search and filter possibilities

... automatic monitoring of service times

... enhanced possibilities to organise work individually

... central navigation to all IT Systems

... seamless integration of 3rd party business tools
Trademark examination task
... are structured data that can be used for Knowledge Management

... are centrally accessible within the Search and BI

... are used to automatically create documents

... are used to automatize processes
What next …

... introduce Big Data technology and enhance BI and Search possibilities

... use the data for AI and further automatize

... integration of front end services to the backend processes
Small Project Team
... 60% less project resources
... 5 Software Developer,
1 Solution Architect, 1 technical PL, 1 PL

Cost and risk reduction
... 50% less software development tasks
... process driven - no functional requirements
... risk reduction - iterative development (scrum)

Business IT-Allignment
... processes, rules and documents are defined and business managed
... all information and content general are transparent for the business
... +30% of administrative processes are automatized
... no IT driven decisions - internal IT is supplier
... step-by-step migration

Source: camunda.com
Questions