# Team project intermezzo

PV207 – Business Process Management

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#### Lecture overview

- Student Project:
  - Organization
- Project phases
  - Responsibilities
  - Requirements
  - Time plan & deadlines
  - Project defense, examination & evaluation
- Questions, discussion

#### **PROJECT MANU**

#### COURSE MANUAL IS THE PRIMARY SOURCE OF INFORMATION

If the information in this slide interferes with the one in manual, the manual has always priority.

# Team project goals

- Improve teamwork skills
- Understand different roles in BPM
- Learn about whole process life-cycle
- Learn how to bridge the gap between analysis and implementation
- Exercise domain analysis
- Exercise precession in analysis documents
- Hands-on BPM related technologies
- Improve presentation and soft skills

# Team project Phase1: Domain analysis

- Tasks:
  - Learn about your domain and context
  - Collect real-world information about domain
  - Define Strategy and vision of your organization
  - Define goals, objectives and measuring indicators
  - Define structure of your organization
- Roles involved:
  - Mainly work of business analyst
  - Discussed with all team members
  - Agreement of whole team

# Team project Phase1: Domain analysis (cont.)

#### Deliverables

- Up to 5 lines describing context of your organization
- $\circ$  cca  $^{1\!\!/}_{4}$  page describing strategy, vision and mission
  - Simple clear and expressive
  - Your goals should be based your vision, but do not repeat the vision in goal definition
- 2+ well defined and described goals
- 10+ well described objectives linked to goals
- Description of KRI/RI/KPI/PI linked to G&O
- Description of organization structure (text or tree)
  - Roles and responsibilities
  - Departments and responsibilities

## Team project Phase2: Process analysis

#### • Tasks:

- Identify important processes in your organization
- Link processes to your goals and objectives
- Define measurement of your indicators on processes
- Describe your processes in detail
- Roles involved:
  - Process analyst, Business analyst
  - Validate with all team members

# Team project Phase2: Process analysis (cont.)

- Deliverables
  - List of identified 8+ identified processes
  - Linked to G&O
  - Linked to indicators
  - Short text description for every process
  - Short description of every data object used in the in process
  - Valid BPMN 2.0 Level 2 for every process

# Team project Phase3: Implementation

- Tasks:
  - Implement described processes
  - Implement some service stubs (service tasks)
  - Implement monitoring (if available)
  - Test your solution
    - User side testing
    - Do backup for presentation (eg. another laptop)
- Roles involved:
  - Process developer, Process analyst
  - Validate with all team members

# Team project Phase3: Implementation (cont.)

#### Deliverables

#### Implementation of 4 executable processes containing:

#### • jBPM BPM

- Integration of 3 web services/java/DB services/rules
- Exception handling mechanism
- email interaction
- 10 human tasks (4 full featured forms)
- 15 30 activities (based on the nature of the processes)
- 4+ intermediate events make sure some of those are included in the process you'll be demoing
- At least one sub process (either embedded or reusable)

#### Bizagi

- Integration of 3 web services/java/DB services
- email interaction
- 10 human tasks (4 full featured forms)
- 2 Queries (BAM) which have to be related to metrics used in analysis
- 15 30 activities (based on the nature of the processes)

#### For all the processes prepare testing data !

# Team project Phase4: Presentation

- 15 minutes presentation (whole team!)
- Presentation will consist of
  - Project & members introduction (roles) 1min
  - Each member explain what have he done 4 min
  - Implementation demo 5min
  - Questions& discussion 5 min

# Team project Phase4: Presentation (cont.)

- Requirements
  - Bring 2 PRINTED copies of your analysis document for the presentation (Phase 1-4)
  - Submit slides for presentation and analysis document 24hrs prior to your presentation
  - Precise timing required !!!!!
  - Projection
    - Presentation and live demo will be from your laptop
    - Do not rely on faculty WIFI

# **Document templates (in IS MUNI)**

- We provide 2 templates
  - Analysis document template (text doc, .odt)
  - Presentation template (presentation .ods)
- Submit 24h before presentation("project" folder)
  - Analysis document pdf (projectName\_analysis.pdf)
  - Presentation pdf (projectName\_presentation.pdf)
  - zip with documented deployable implementation, and short howto (projectName\_implementation.zip)
- Fill template, use openoffice export to PDF, do not change templates too much

#### **Common project/presentation Crimes!**

- Process-kpi-objective relation is vague, faulty or does not exist at all
- KPIs lack targets or units
- Processes are not readable in the final document (small/bad resolution...)
- Analytical document is not prepared and printed in 2 copies for the presentation
- The term "implemented service" is not understood correctly
- The work contain required minimum, there is lack of invention...

#### Schedule (may be updated)

- Phase 1: Domain analysis
  - Recommended: ~9.3 ~30.4.
- Phase 2: Process analysis
  - Recommended: ~30.3 ~11.5.
- Phase 3: Implementation
  - Recommended: ~28.4 ~18.5.
- Phase 4: Presentation
- Preparation: Recommended: ~1.5 ~18.5.
  Presentations & Written exam (test cca 1hr no materials): ~~ 25.5 – 22.6.

#### **Evaluation & examination**

#### Evaluation:

- Homework assignments
  20%
- Test 30%
- Team project 50% =
  - Analysis 20%
  - Implementation 20%
  - Presentation 10%
- Scoring less than 60% in any of above means immediate FAIL (F) !
- Candy Hunt = up to 10% extra can save you from F !

### Examination:

- Team project presentation
- Automagically generated, written multiple-choice test (no materials)

#### Grades:

- A 100-86 %
- B 85-82 %
- C 81-79 %
- D 78-75 %
- E 74-70 %
  - F < 69 % (FAIL)

# FIN Questions?

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# Feedback Questions? Break 10mins

Process modeling section leftovers ;)

# Different motivations for BPM-based development

#### • Human-centric BPM

- Management of human-centric processes
- Large amount of human-tasks (forms, portlets etc.)
- A comprehensive technology for User-interface needed
- Integration of systems
  - Integration of WS and other interfaces of various systems together
  - Involves middleware (Messaging , ESBs etc)
  - Orchestration of inter-system communication
- Document-oriented BPM
  - Management of document-flow
  - Often combined with Human-centric systems

#### Two kinds of work

#### Routine work

- Work process can be easily defined in advance
- Sequences of tasks (processes) are repeated frequently
- Uniformity of sequences is desired
- BPM helps to achieve the uniformity
- Easy from process modeling perspective
- High process rigidity desired
- Knowledge-intensive work
  - Sequence of tasks is defined by decisions of the worker
  - Many exceptional situations possible
  - Knowledge of the worker plays key role
  - Ad-hoc process welcomed/wanted

#### Flexiblity of process models

Dynamic aspects of process models:

Dynamism

How the process evolves over time

Adaptability

How the process handle the exceptional situations

#### Flexibility

How the process handle the on-fly activity ordering

# Dilema of knowledge intensive processes and BPM approach

 Traditional process models define activity ordering explicitly

In knowledge-intensive processes we need to ad-hoc ordering of activities

Traditional processes codify know-how in the model structure

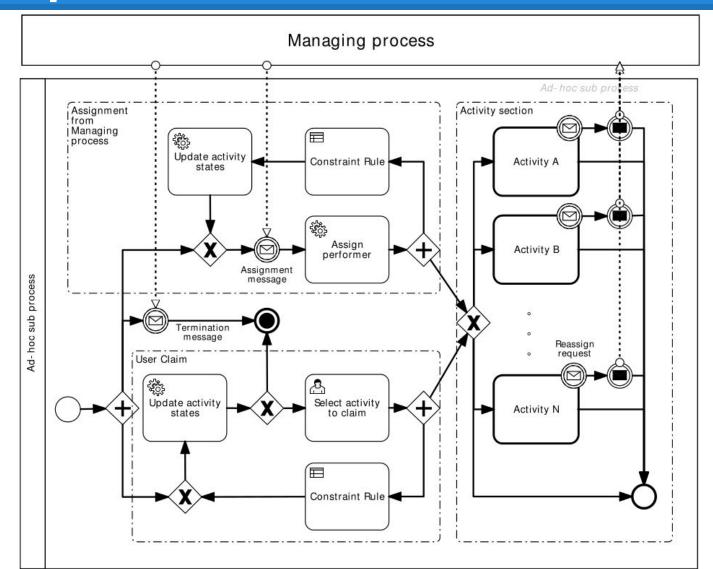
Ad-hoc processes codify know-how by recording historical instances (ACM - principle)

 Ad-hoc ordering is usually needed in small part of the whole process
 We need to isolate the ad-hoc parts from the rest

### Ad-hoc/ knowledge-int. processes: Possible solutions

- Manage things ad-hoc "from the table", do not automate
  - Good solution in small scale
  - Loss of control, reliable knowledge-workers needed
- Use Adaptive Case Management
  - Specific approach, specific situations
- Use specific ad-hoc patterns
  - A way how to use Ad-hoc processes in BPM context
- Model complex process models
  - Often results in chaotic process models and consequent chaotic implementations

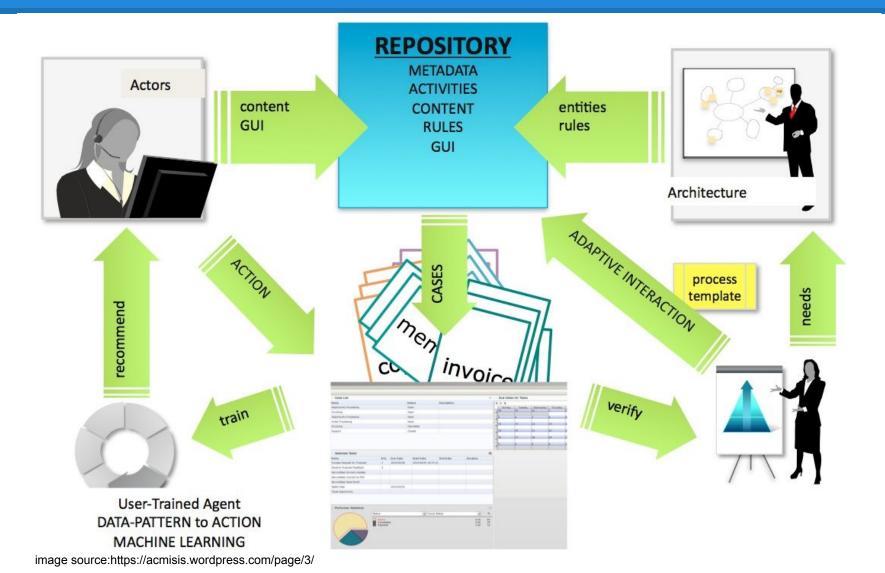
# Ad-hoc process modelling pattern example



# Adaptive Case Management basics

- Knowledge workers are handling larger volumes of processes with heterogenous structure = "cases"
- A "case" is a set of activities to be performed, however the order is not important = "ad-hoc process"
- Similar cases means processing similar information
  = "utilization of similar resources" (documents)
- There is a need for continuous definition of a best-practice walk through the process
  - = "continuous process discovery"

#### **ACM concepts**



# FIN Questions?

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