Process architecture & Project consultations

PV207 – Business Process Management

Spring 2014   Jiří Kolář

Lecture overview

- Process architecture again
- Advanced topics
  - Process Mining & discovery
  - Adaptive Case Management
  - ACM vs BPM
  - Process dynamism

Process architecture - Motivation

- There can be many processes in an organisation and we need to organise them
- MUNI = more than 100 processes
  - How to identify a processes?
  - How to categorise those processes?
  - How are processes interacting with each other?
  - How to describe such interactions?
  - What happen in case of change (business focus, organisational)?
  - How to capture process dynamism?

How to identify processes?

- Process is a sequences of steps that "handle" a business entity
  - We have to identify those entities first!
  - Entity examples:
    - Order
    - Product
  - Process Examples:
    - Prepare an order
    - Manufacture a product
- A Process can "handle" other process as well
  - Examples:
    - Manage a flow of orderes
   - Manage the manufacture of products

How to categorise processes?

- By organisation structure
  - +Naturally easy way of categorising
  - - Does not reflect reality (Hacks needed)
  - - Fragmentation of real process
  - - Silos are back!
- By the "business entity" they are related to
  - + Organisation structure independent
  - + Reflects reality
  - - Needs more effort during analysis
  - - Harder to understand by process actors
- By the process hierarchy
  - But how do we build the hierarchy?

How are processes interacting ?

- There are quite some possible ways of process interaction:
  - Instantiation
  - Activation
  - Deliver to
  - Notify
  - .....

- Some of them create new processes?

How to describe such interactions?

- Just by BPMN and choreography diagrams
- Process architecture diagrams
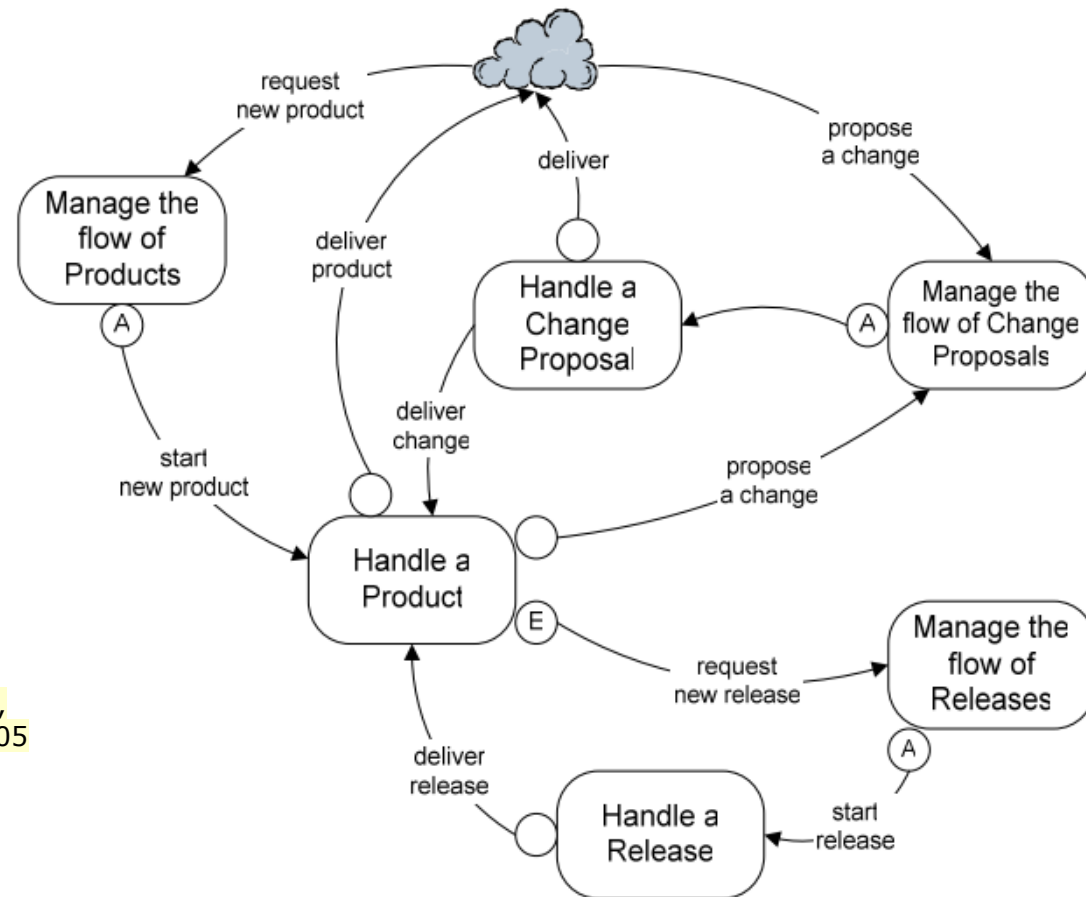
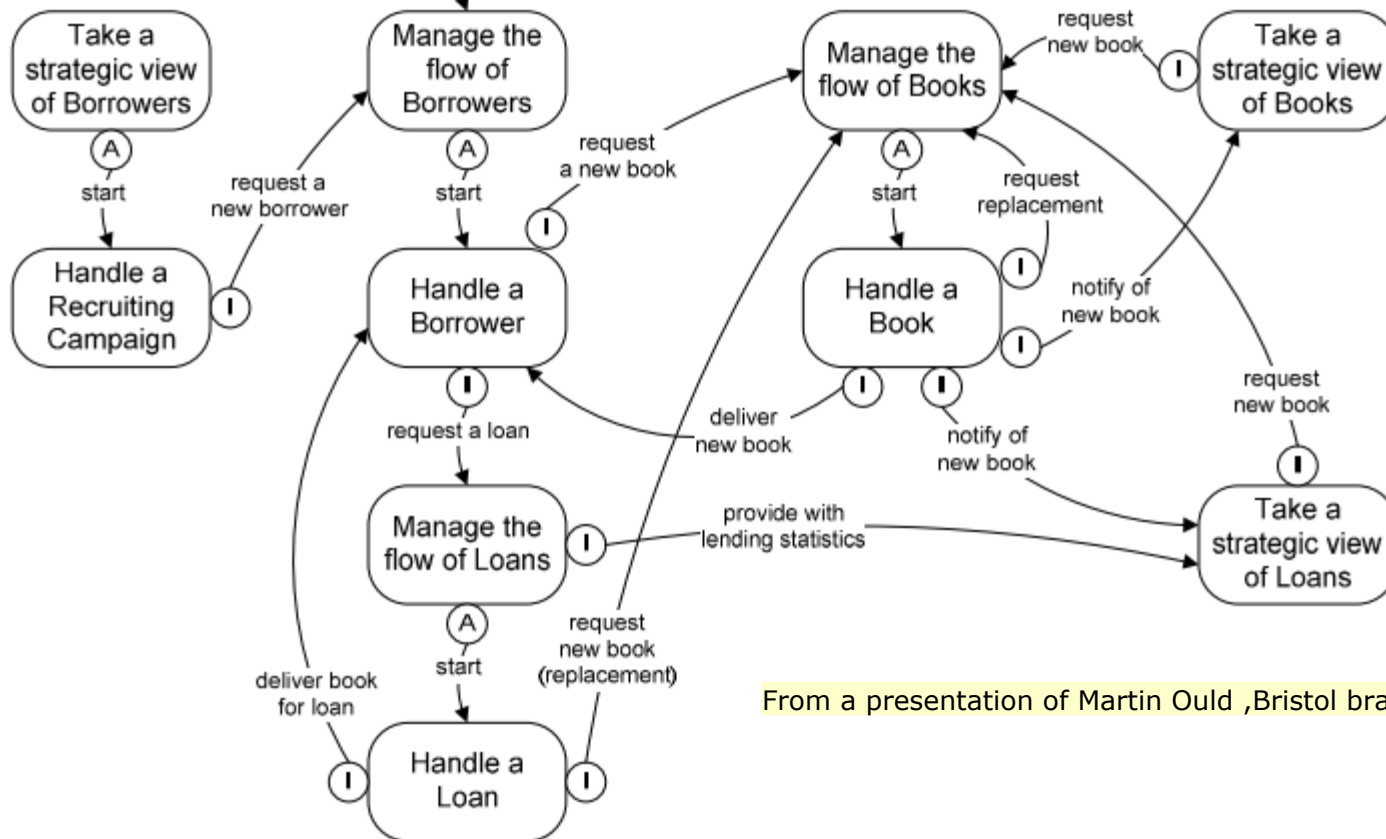From a presentation of Martin Ould , Bristol branch of the BCS in May 2005

What happens in case of change?

- Changes in organisation structure
  - Processes aligned with organisation structure
    - Significant rework
  - Structural-independent process architecture
    - No changes in ideal case
- Changes in Business focus
  - Processes aligned with organisation structure
    - Not much, update of some processes
  - Structural-independent process architecture
    - Complete rework

How to capture process dynamism?

With precise process architecture

From a presentation of Martin Ould ,Bristol branch of the BCS in May 2005

Questions?
Break 10mins

Integration centric vs Document centric BPM

- Integration centric
  - Processes consists of interactions with different components or systems
  - Main goal is to integrate different systems
    - Legacy
    - External services
    - Different platforms and systems
  - Unification of user interface
- Document centric
  - Process consists of document handling
  - Document workflow can be often implemented in a DMS with workflow capabilities.

Adaptive Case Management

- Fits for certain knowledge intensive work
  - Court investigation cases
  - Insurance claims
  - Medicine
  - Handling a customer cases....
  - ....
- Each case can be a unique process (ad-hoc)
- Usually document-oriented
- Not so widely used approach
- CMMN (Draft) - Analogy of BPMN

BPM vs ACM

- Adaptive Case Management
  - Processes activities performed in ad hoc order
  - Case (as an instance) is a first class citizen
  - Patterns detection and reusability
  - Document management
- Business Process management
  - Process activities performed in defined order
  - Process (as a definition) is first class citizen
  - Process is a pattern itself
  - Document oriented or integration oriented

Dynamic aspects of processes

- Dynamism
  - Ease of design-time process change and reengineering
  - Problem: versioning of concurrent process instances
- Adaptability
  - Ability to cope with exceptional circumstances and non standard behaviours
  - i.e. Exception handling
- Flexibility
  - Amount of partially defined model structures specified in design time, which allow ad-hoc behaviour in run-time

Ballance process rigidity

- Processes should:
  - Navigate users to maintaining good practices in work process
  - Codify an efficient and goal oriented work-process
  - Keep work-process uniform and measurable
- Processes should not:
  - Tight hands of a worker, inhibit improvements
  - Raise work-process complexity and administrative overhead
  - Decrease work-process efficiency
  - Cause technological overkills

FIN
Questions?

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