

ISPIM - *The Future of Innovation* - 21-24 June 2009

# Enterprise Innovation Planning with social software

Mixel Kiemen

**M**athematics, **O**perational research,  
**S**tatistics and **I**nformation systems



Vrije Universiteit Brussel

# Introduction

## Observation

- Acceleration in innovation (Red Queen principle)  
*"It takes all the running you can do, to keep in the same place"*
- Problem with visionary leader  
⇒ Pitfall for risk management (f.e. Steve Jobs)
- Similarity between ERP & EIP  
⇒ One-man-show to mediator (f.e. the supper-accountant)

## Dichotomies of innovation: continues / discontinuous

- incremental / radical ⇒ product (f.e. technology)
- component / architectural ⇒ processing (f.e. production)
- sustaining / disruptive ⇒ value (f.e. usability)

# The EIP challenge

## Innovation management

- We talk about S-curve, but got a bifurcation  $\Rightarrow$
- Discontinuous innovation can be accidental

## EIP challenge

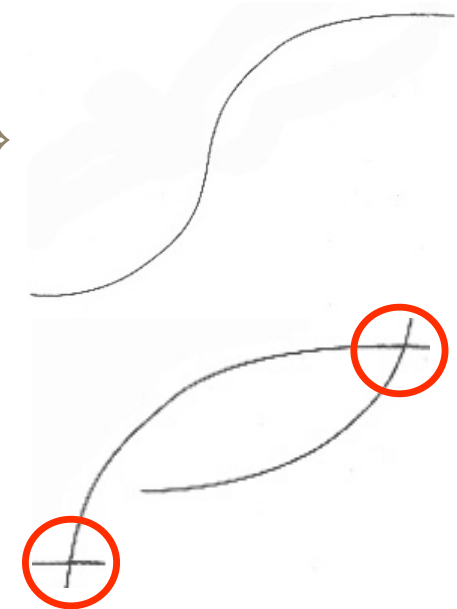
- aligning business, IT & ecosystem
- creating structure and function of EIP
- Using discontinuous learning theory

## Discontinuous learning theory

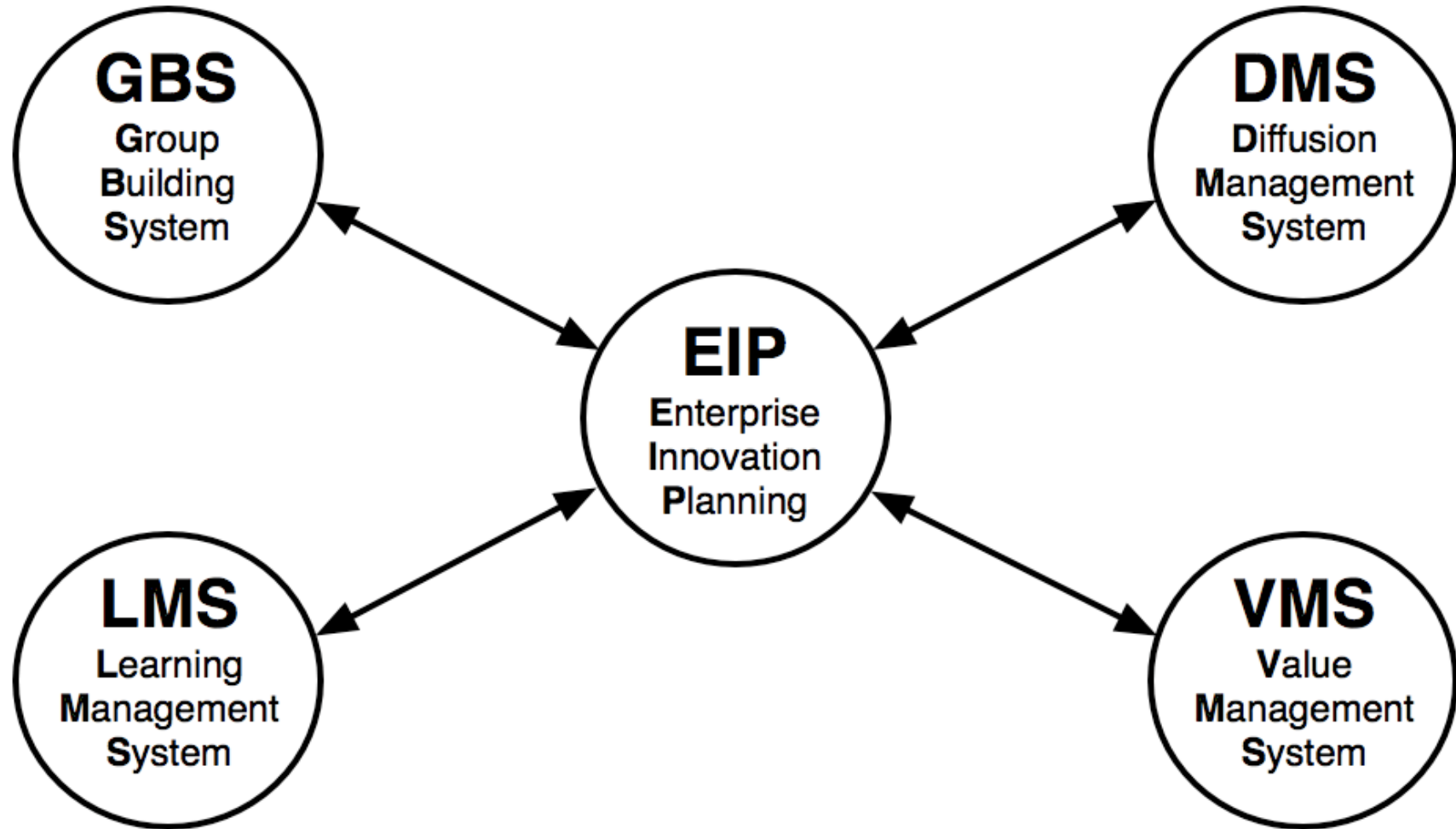
- Experience can be a resistor for change

- Novelty = the inherently unknown, know by actions  
 $\Rightarrow$  Novelty Action (NA-)model

$\Rightarrow$  Vague idea  $\Rightarrow$  iterative incremental development  $\Rightarrow$  concrete ideas



# EIP structure



# EIP structure

support slide

## Group Building System

- Creating & managing groups by brainstorming events

## Diffusion Management System

- Diffusing the NBD- group (New Businesses Development)
- Community contribution methods

## Value Management System

- Creating, capturing & protecting value

## Learning Management System\*

- Learning what is inherently unknown (novelty) by taking action

\* Our focus, our own research, the other are emerging systems

# Learning, theory & management

## Discontinuous learning by NA-model:

- **Learning:** merging the new experience & focus by motivation  
⇒ Need to get tested
- **Reflection:** creating the internal
  - Raw experience categorized ⇒ virtual concepts
- **Mastering:** creating the external
  - Virtual concepts applied ⇒ raw experience
- **Balancing:** taking everything into account
  - When balance holds ⇒ shift to continuous learning (blackboxing)

## Learning Management System:

- SWOT by reflecting & Action-plan by mastering

# Co-value-creation

With Intellectual Commons Community (ICC)

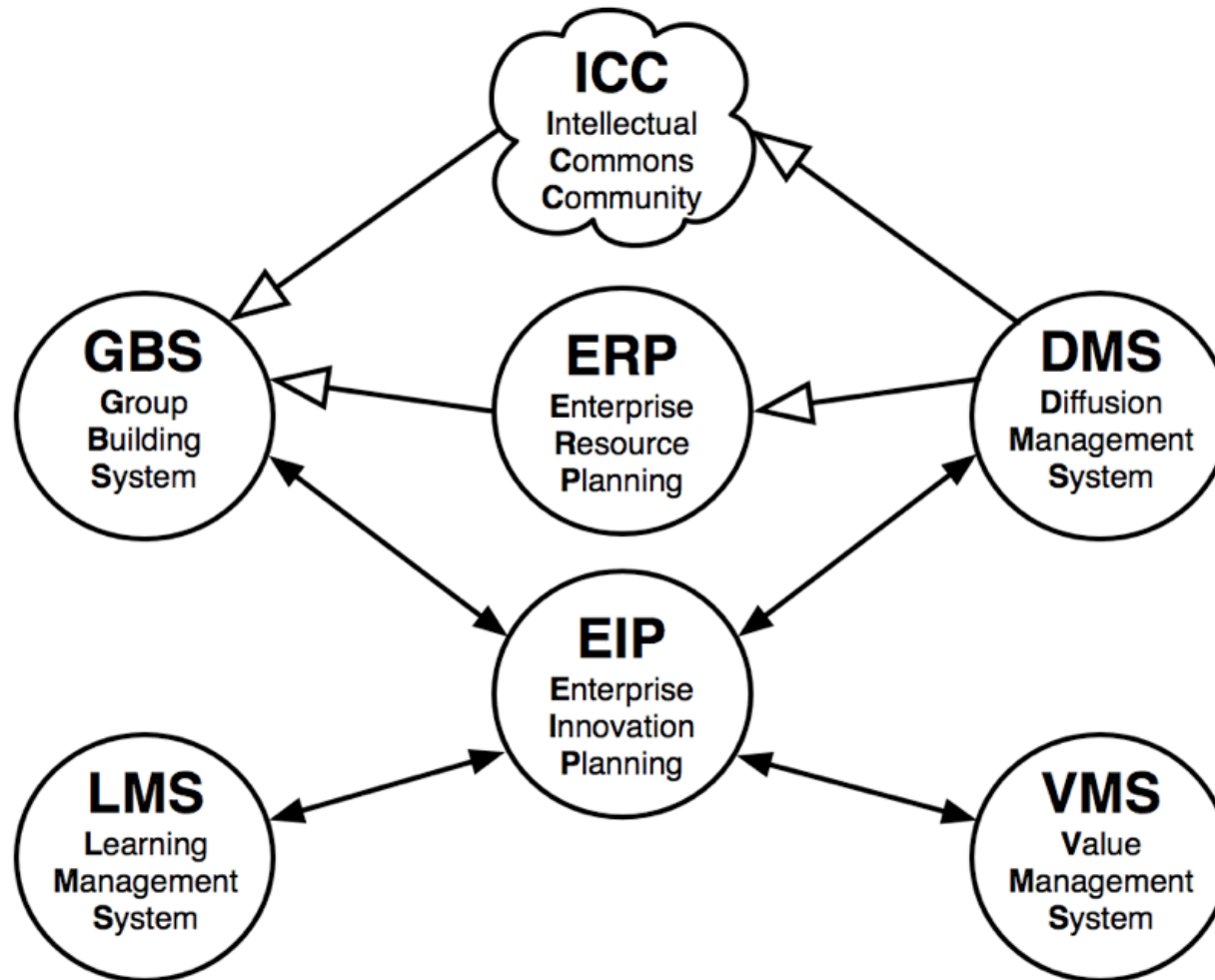
## From closed to open innovation models

- Old closed models  $\Rightarrow$  no relation with ICC
  - $\Rightarrow$  Own (secret) New Businesses Development (NBD)
- Early open models  $\Rightarrow$  contract between ICC & NBD
  - $\Rightarrow$  IBM & Apache: Apache could do development better
- Recent open models  $\Rightarrow$  partnership between ICC & NBD
  - $\Rightarrow$  Symbiotic/cultivating relation (business ecosystems)

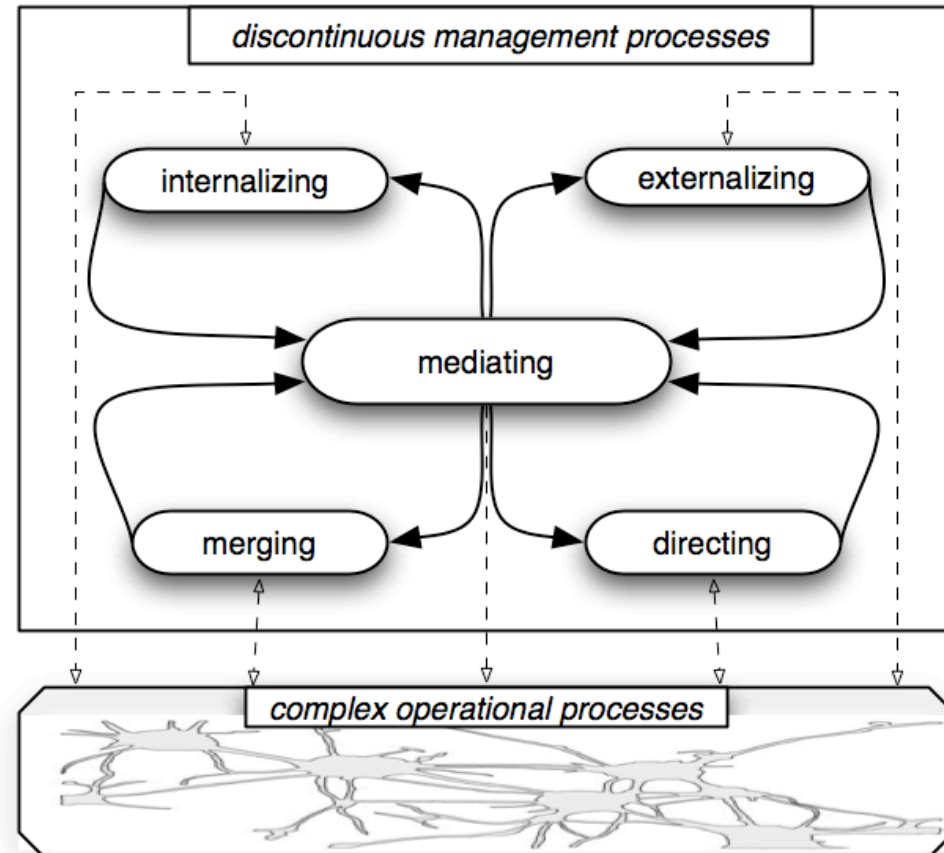
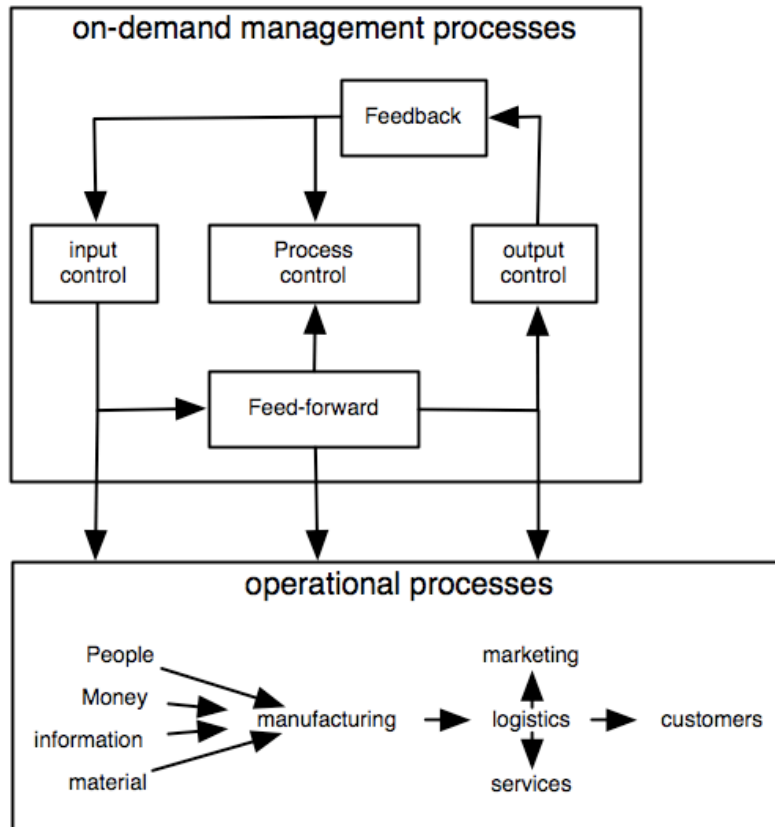
## Learning about value

- Creating value  $\Rightarrow$  the contribution (developers, money, etc)
- Capturing value  $\Rightarrow$  learning from mistakes (xerox, apple  $\Leftrightarrow$  IBM)
- Protecting value  $\Rightarrow$  legal structure & value over time

# EIP + input/output



# EIP functional & NA-model



# EIP functional & NA-model

Support slide

## Internalizing

- Creating associations to Strengths & Weaknesses

## Externalizing

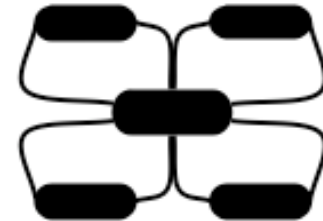
- Tagging in the external world, identifying markets

## Directing

- Defining business plan (motivation) by Opportunities & Threats

## Merging

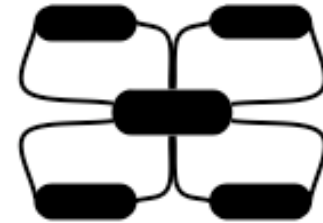
- Sharing experience, acquisition of competitors



# The art of mediating

## The nodes connecting all the links

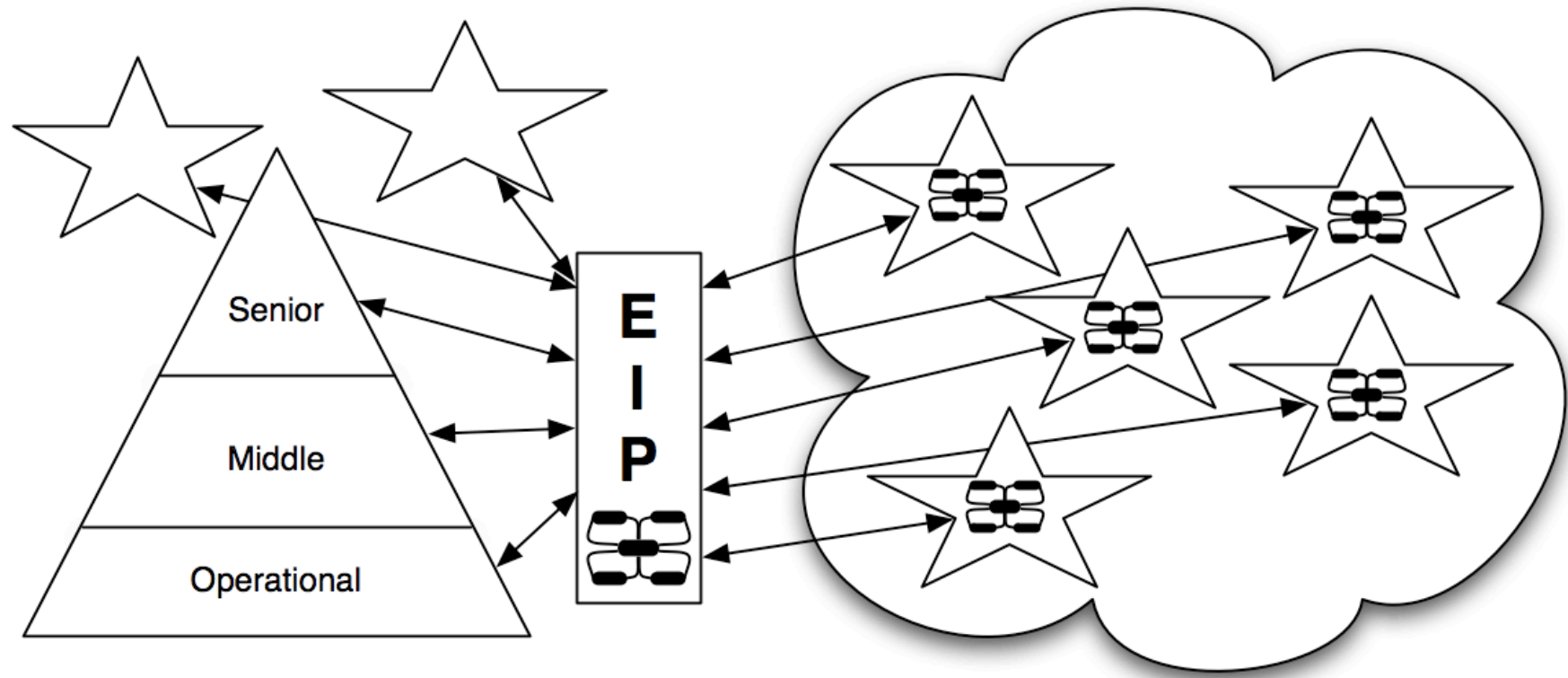
- SWOT  $\Rightarrow$  Internalizing & directing
- Action plan  $\Rightarrow$  externalizing & merging



## Type of mediators

- Blackboxing versus breakdown
  - Blackboxing  $\Rightarrow$  creating an autonomous entity
  - Breakdown  $\Rightarrow$  decompose entity (opening the blackbox)
- Interference = rationality changes: f.e. digitalization & music industry
- Composition = the sum is more than the parts: f.e. a car, a computer, ...
- Delegation = replacing scarcity by abundance: f.e. renewable energy

# EIP conclusion



# EIP conclusion

support slide

## Added values of the EIP-model:

- Structure for discontinuous innovation
- Measuring the degree of context strength and degree of novelty
- Manage novelty, create new knowledge (KPI, BSC)

## Ongoing research

- Using social software to support the EIP
- Bringing EIP to practice.

# Questions ?

[info@mixel.be](mailto:info@mixel.be)



Vrije Universiteit Brussel