

## Pavel Náplava CTU FEE in Prague

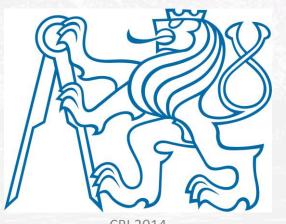
**Centre for Knowledge Management** Since 2009

- Information Management
- Information Systems
- Business Process Management
- Project Management
- Business Analytics
- Business Informatics
- Applied Management
- Clouds



# How to Successfully Start the Transformation of an Academic Institution

Case study on the process mapping project at the Czech Technical University



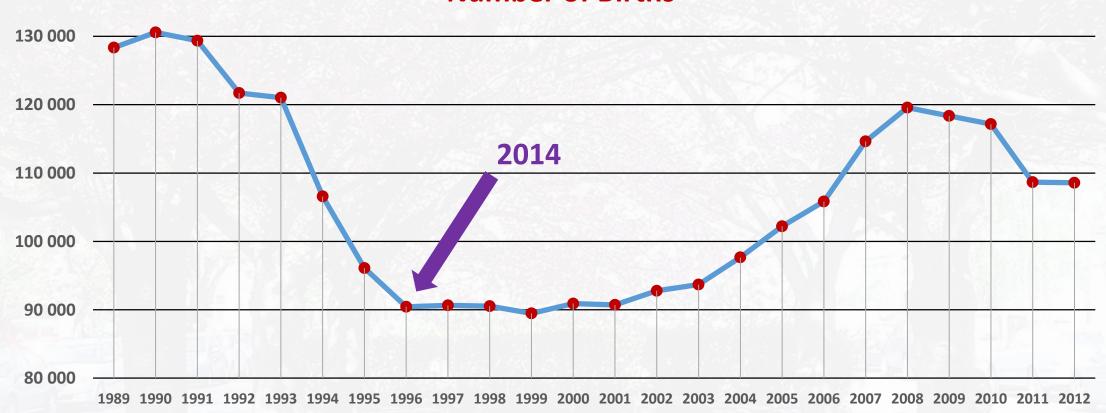
## TRANSFORMATION REASONS



http://hs-ib.ism-online.org/

## LIVE BIRTHS DEVELOPMENT

#### **Number of Births**



## PROBLEMS & SOLUTIONS

- **Description** Lower budget
- **Higher competition**
- **Industry cooperation**
- **Scientific projects**

- **Minimal costs**
- **Minimal redundancy**
- **Automation of processes**
- **Full-Cost model**

## CENTRE FOR KNOWLEDGE MANAGEMENT

- Internal BPM Center of Excellence
- Established in 2009
- Staff:
  - 2 Full-time employees,
  - 3 PhD, 15 Bc. and MSc. students
- Activities:
  - Education (5 subjects, 30 thesis)
  - Science
  - Internal / external Projects
- Part of the faculty management

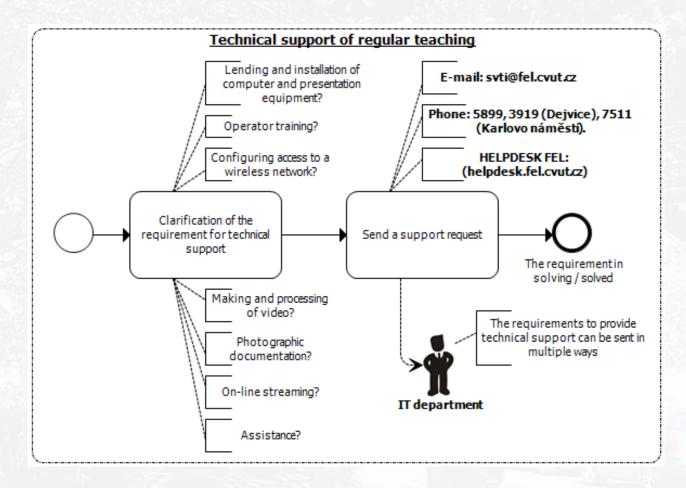


# **BUSINESS PROCESS MAGEMENT (BPM)**

- No similar successfull project exists in Czech Republic
- Ministry of Education, Youth and Sports prepared basic framework for effective academic institutions based on Lean Methodology
- New BPM project with the following goals
  - 1. Map and describe supporting processes
  - 2. Optimize supporting processes
  - 3. Present all processes to employess, students and public
  - 4. Reduce redundancies
  - 5. Automate selected processes
  - 6. Examine BPM in order to determine its usage for the university

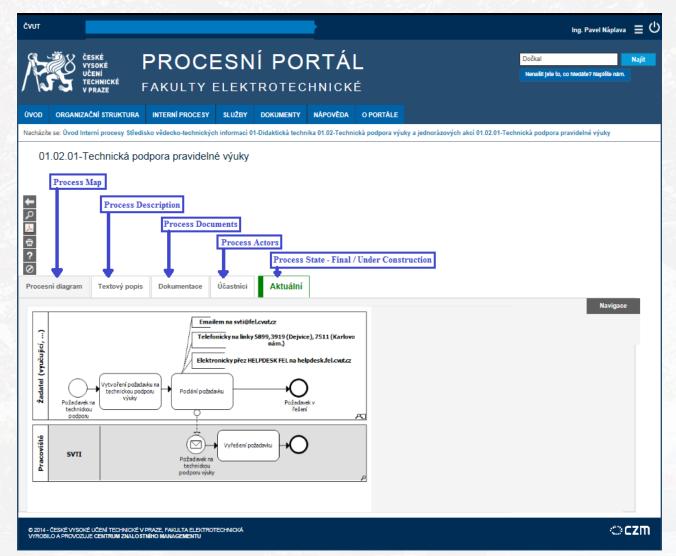
## **PROCESS AS A SERVICE**

- Based on BPMN notation
- Scenario of user actions
- Group of all related processes and information for doing an activity
- Combination of AS-IS and TO-BE state



## **PROCESS PORTAL**

- Part of the faculty web
- Can be used by employees, teachers, students and public
- Anyone can provide a feedback
- Anyone can make a new proposal



**CBI 2014** 

## PRESENT STATE OF THE BPM PROJECT

- All Supporting processes are mapped
  - 300 Process maps
  - 150 Processes as a service
- Process portal is working
- 3 Processes were selected for the automation
- Process models are used for the faculty operations
- Position of the centre is established and strong
- State of the project: SUCCESSFUL



## **BPM PROJECT KEY SUCCESS FACTORS**

- 1. ENVIRONMENT understanding of an institution and its culture
- 2. TEAM creation of an experienced and acceptable team
- 3. **COMMUNICATION** building of communication channels and continuous communication
- **4. PRESENTATION** selection of the appropriate form of presentation of results
- 5. GOALS definition of real, achievable and meaningful goals

## KEY SUCCESS FACTOR MATURITY MODEL

#### 0 = nothing

New area for us

#### 2 = basic

Having basic idea

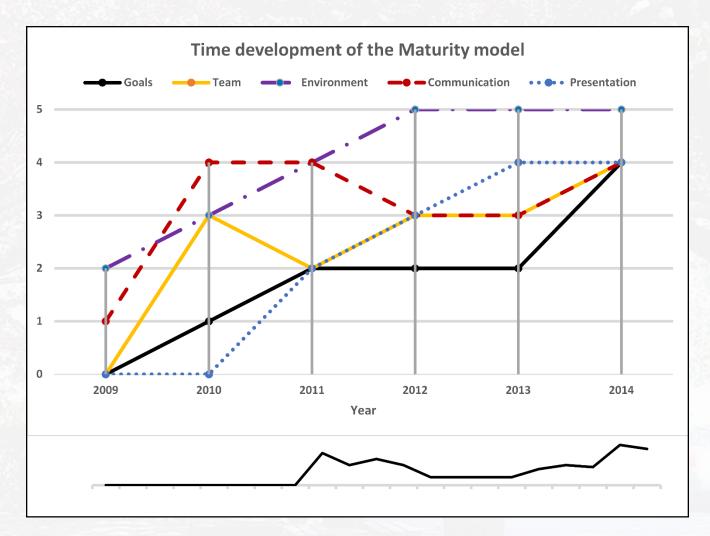
#### 4 = complex

Knowing nearly everything about the area

#### 5 = excellent

Having excellent knowledge

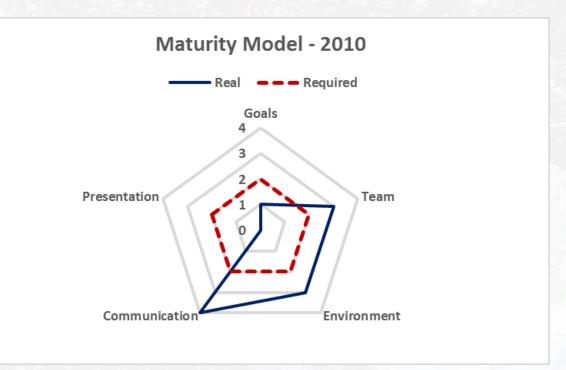
Minimal sucess value = 2



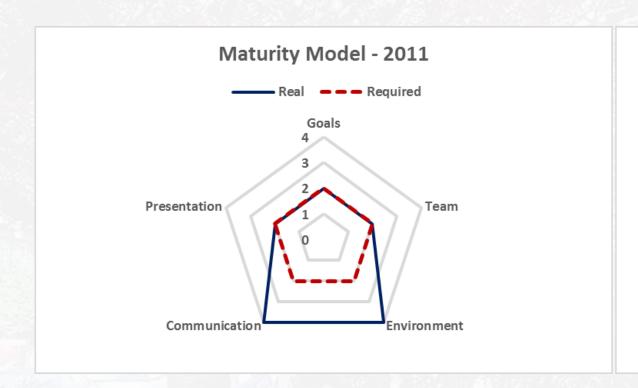
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## **MATURITY MODEL DEVELOPMENT 2009-2010**



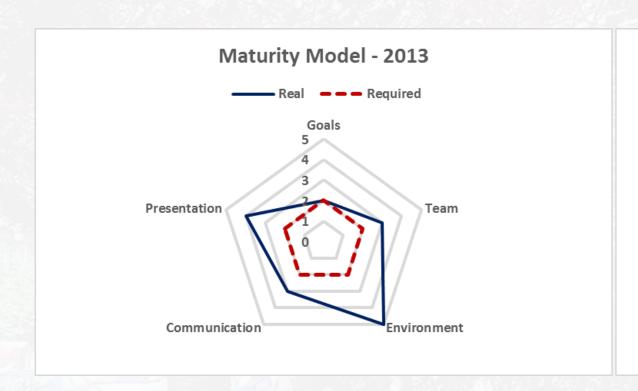


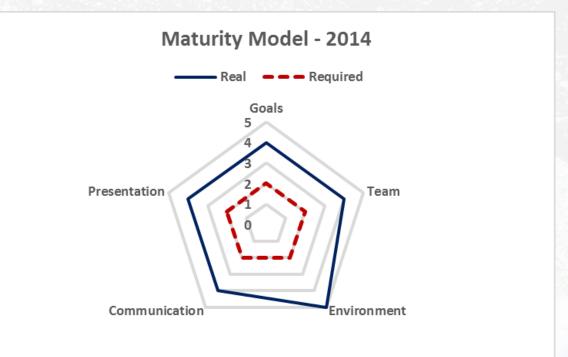
## **MATURITY MODEL DEVELOPMENT 2011-2012**





## **MATURITY MODEL DEVELOPMENT 2013-2014**





## **EXTERNAL COOPERATION**

- West Bohemia University in Pilsen
  - Similar but unsuccessful project
- Faculty of Mechanical Engineering at CTU in Prague
  - Process portal
- ŠKODA PRAHA Invest
  - Commercial project
- New experiences & source of financing



### CONCLUSION

#### PROJECT HAS BEEN SUCCESSFUL

- Reasons why the project was successful
  - 1. Internal Center of Excellence
  - 2. Full responsibility for the project
  - 3. Combination of practical experiences and student's flexibility
  - 4. Patience and tolerance of mistakes
  - 5. Not tightly defined goals at the beginning of the project
  - 6. Flexibility, appropriate communication, feedback, creativity, ...

#### Further steps:

- Cooperation with the Rector's Office
- Preparation of the university information strategy
- Mapping of selected main processes



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## **CONTACTS**



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