MPH_BUPM Business Process Management sylabus

Main teacher: Michal Krčál

Lecture: Thursday 15:30, room 306

Seminar: Thursday 16:20, room 306

Teaching methods: lectures, class discussion, reading, team work, presentation.

Aims of the course

At the end of the course, students should be able to:

- define basic terms connected with BPM and BPMS;
- describe techniques for retrieving information about processes, for modeling processes and for optimizing processes;
- explain the concept of BPM (e.g. parts of the management discipline, frameworks used for implementing and managing BPM);
- understand the importance of processes and their management in the context of the whole organization management;
- orient in variety of information tools that support BPM;
- create a process model of an organization;
- optimize semi-complex business processes.

Course organization

Course has one hour lecture and two hours seminar, however, the actual distribution of seminars and lectures will make first half of the semester more theoretical (lectures will be instead of seminars) and the second half of the semester more practical (seminars instead of lectures).

Mandatory reading list

- Handbook on business process management. Edited by Jan Vom Brocke - Michael Rosemann. Berlin: Springer, 2010. xix, 612 s. ISBN 9783642004155. ONLY PARTS
- Handbook on business process management. Edited by Jan Vom Brocke - Michael Rosemann. Berlin: Springer, 2010. xix, 616 s. ISBN 9783642019814. ONLY PARTS
- WHITE, Stephen A. BPMN modeling and reference guide: understanding and using BPMN : develop rigorous yet understandable graphical representations of business processes. Lighthouse Point: Future Strategies, 2008. 225 s. ISBN 0-9777527-2-0.
- DUMAS, Marlon. Fundamentals of business process management. Heidelberg: Springer, c2013, xxvii, 399 s. ISBN 9783642331428. ONLY PARTS

Assessment

- Mid-term test = 25 %
  - mixed questions (closed, open), based on first six weeks of lectures and reading
- Active participation = 10 %
  - 5 % active and value-added participation in classes
  - 5 % reading summaries
- Team project = 65 %
  - 20 % quality of project defence and discussion based upon the project ("oral exam")
  - 45 % quality of project

Team projects

The goal of the team project is to conduct a process analysis in an organization. Which organization (or enterprise) you will be analysing is your choice. The team project should have following structure:

- Introduction – mainly the content of the project and reasons of choosing the organization (enterprise)
- Description of methodology – how did you perform the analysis, retrieved and analysed data, which software did you used, how did you spread the work between team members etc.
- Description of the organization (enterprise) – describe briefly the organization (location, size, business model, financial condition etc.)
- Process architecture – create Value chain diagram or Enterprise Architecture diagram of the enterprise
- Model of two core (primary) processes – describe in detail two core (primary) processes and model them according to BPMN.
- Analysis of on core (primary) process and its optimization (possibly with simulation) – choose one primary process, analyse it and design, reason, simulate, and justify its optimization.
- Conclusions – summary of the whole project.

In order to be able to produce document with such structure, you should find a company (Czech company, your home country company) in which you can get access and be able to get information and data about processes. As a first step of the analysis, you should design process architecture in order to know, which processes are important in the organization and which processes are candidates for optimization. Then, you should choose two core (primary) processes and describe them and model them with the use of BPMN and modelling tool. Then, according to process architecture, you should chose at least one core (primary) process and optimize it, design to-be model and reason you optimization (in terms of strategic goals, money etc.).

For the purpose of the projects, you will be divided in the groups each containing four members.

The projects will be assessed according to following criteria:

- Overall quality of the text and reasoning = 8
- Precision of organization description = 5 points
- Quality of process architecture = 8 points
- Model of one core (primary) process and description = 8 points each (you are supposed to make at least two of them)
- Optimization of one process = 8 points
- Quality of the presentation and defence = 20 points

Lectures

Schedule of lectures

Week	Date	Topic	Seminar	Teacher
1	24/09	Introduction to BPM	----	Michal Krčál
2	1/10	BPM Conceptualization	----	Michal Krčál
3	8/10	Strategy, governance, culture and people	----	Michal Krčál
4	15/10	Methods, ICT and process modelling	Demonstrations	Michal Krčál
5	22/10	Business Process Model and Notation	Modelling activities	Michal Krčál
6	29/10	Advanced modelling in BPMN	BPMN Modelling activity Modelling tools	Michal Krčál
7	5/11	Process analysis	----	Jakub Vrchlabský
8	12/11	Process architecture	Mid-term test Case-study part 1	Michal Krčál
9	19/11	Information retrieval and gathering	Case-study part 2 Project consultations	Michal Krčál
10	26/11	Brown-paper session	Case-study part 3 Project consultations	Michal Krčál
11	3/12	Process optimization	Case-study part 4 Project consultations	Michal Krčál
12	10/12	Process simulation	Case-study part 5 Project consultations	Michal Krčál
13	17/12	BPM implementation	Real case demonstration Project consultations	Jakub Vrchlabský

Week 1 – Introduction to BPM

The goal of the lecture is to introduce the basics about Business Process Management (BPM) and to outline the whole course. Reading mandatory article from CIO magazine should give you basic understanding of BPM.

Mandatory reading:

- Sylabus
- CIO: What is BPM?

Lecture:

- Course organization
- Introduction to Business Process Management

Week 2 –BPM Conceptualization: models and frameworks

The goal of the lecture is to systematize the discipline of BPM, to introduce some models and frameworks that describe the nature and the content of BPM. Also history of BPM will be briefly discussed.

Mandatory Reading:

- Michael Hammer: What is Business Process Management?
- Rosemann, Michael and Jan Vom Brocke: The Six Core Elements of Business Process Management.
- Dumas et al., chapter 1

Further Reading:

- Paul Harmon: The Scope and Evolution of Business Process Management (HoBPM 1)
- Thomas Davenport: Process Management for Knowledge Work (HoBPM 1)
- Rummler and Ramias: A Framework for Defining and Desiging the Structure of Work (HoBPM 1)

Lecture:

- BPM Life-cycle
- Six Core Elements of BPM
- Capability and Maturity Model

Week 3 – Strategy, Governance, Culture and People in BPM

BPM is not only about modelling and ICT, therefore strategy, governance, organizational and process culture, and people aspects are important and should be gathered as equal parts of BPM.

Mandatory reading:

- Roger Burlton: Delivering Business Strategy Through Process Management (HoBPM 2)
- Lynne Markus and Dax Jacobson: Business Process Governance (HoBPM 2)
- Ulrike Baumoel: Cultural Change in Process Management (HoBPM 2)
- Kokkonen and Bandara: Expertise in Business Process Management (HoBPM 2)

Lecture:

- What is strategy and what does it mean managing processes strategically
- Day to day process management – governance
- Organizational culture should be process culture
- People are the cornerstone of BPM

Week 4 – Methods and Information Technology in BPM

The core pillars of BPM are methods and ICT that support the activities along the process life-cycle. One of the most important activities is business process modelling. Dynamic nature of process analysis and frequent needs to redesign and change process models results in usage of SW made for process analysis. In this lecture, some BPM systems (suites) will be introduced.

Mandatory reading:

- Conger Sue. Six Sigma and Business Process Management. Handbook vol. 1
- Islay Davies and Michael Reeves. BPM Tool Selection: The Case of the Queensland Court of Justice. Handbook vol. 1
- Sidorova Anna, Russell Torres, and Alaa Al Beayeyz: The Role of Information Technology in Business Process Management
- Weske: chapter 3
- Dumas et al., chapter 9

Lecture:

- Methods and Information Technology in BPM
- Process Modelling (general)

Seminar:

- Process modelling activity

Week 5 – Business Process Model and Notation

Modelling of processes can be done with different notations. The de facto standard for modelling business processes is Business Process Model and Notation (BPM). This lecture will introduce the basic elements of notation and their usage.

Mandatory reading:

- Stephen White: Introduction to BPM
- Dumas et al., chapter 3

Seminar:

- Introduction to BPMN
- BPMN modelling activity

Week 6 – Advanced Modelling in BPMN and Modelling Tools

Basic understanding of BPMN does not suffice to model all various kinds of processes. In this lecture you will focus on more advanced modelling techniques and you will get familiar with modelling tool BizAgi Modeler.

Reading:

- Dumas et al., chapter 4

Seminar:

- BPMN modelling with the use of modelling tools

Week 7 – Process analysis

The lecture will be delivered by Jakub Vrchlabský, professional who is involved in BPM projects.

Reading:

- To be announced

Lecture:

- To be announced

Seminar:

- To be announced

Week 8 – Process architecture

In order to make process analysis of a company, usually, top-down approach is used. Therefore, process architecture or business map of a company is designed according to high level abstraction of business processes that has to be identified.

Reading:

- Dumas et al. ch. 2

Lecture:

- How to make process architecture

Seminar:

- Team activity on case-study

Week 9 – Information retrieving and analysis

In order to gather valid and reliable information about processes, process analyst has to know something about data gathering and analysis. Therefore, introduction to expert interview method and qualitative data analysis will be the content of this week.

Reading:

- Dumas et al., chapter 5

Lecture:

- How to retrieve information
- How to perform interview

Seminar:

- Role-play on case-study

Week 10 –Brown-paper session

Modelling, analysing and thinking about processes in team can be difficult or even contra productive. The goal of this seminar is to introduce one way, how to brainstorm over and design processes in a group.

Reading:

- Dumas et al., chapter 6

Seminar:

- Team activity on case-study

Week 11 – Process optimization

Process analysis is only one step in BPM life-cycle. The main purpose of BPM is to tailor the process to organizational needs and to optimize it. This lecture will focus on some approaches that can be used for process optimization.

Reading:

- Dumas et al., chapter 8

Seminar:

- Team activity on case-study

Week 12 – Process simulation

In order to optimize the processes and know how the change will impact the process, simulation of processes is important to minimize possible risks and costs of process design faults. In this lecture, you will try to simulate a process with the help of simulation tool.

Reading:

- Dumas et al., chapter 7

Seminar:

- Team activity on case-study

Week 13 – BPM implementation and CSF

The lecture will be delivered by Jakub Vrchlabský, professional who is involved in BPM projects and will introduce real case of BPM implementation and process analysis.

Reading:

- To be announced

Lecture:

- To be announced

Seminar:

- To be announced