

BPMACADEMIC INITIATIVE



Fostering Academic Research

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Business Process Technology



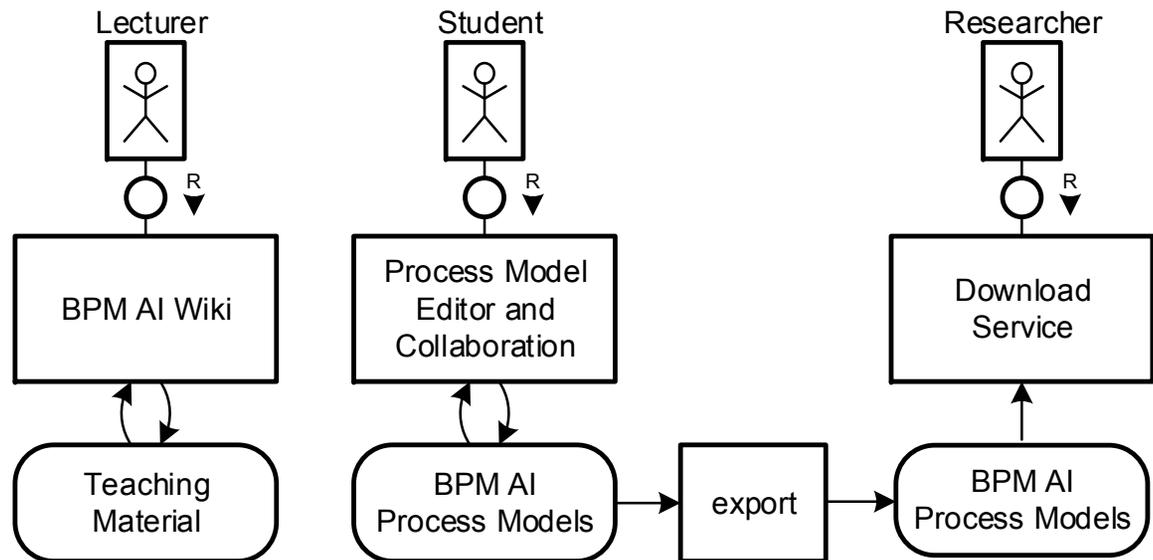
The BPM Academic Initiative Offers

Education

- comprehensive teaching material
 - by the academic partners
- professional web-based model editor and collaboration platform
 - by Signavio

Research

- large collection of models created by users of the platform

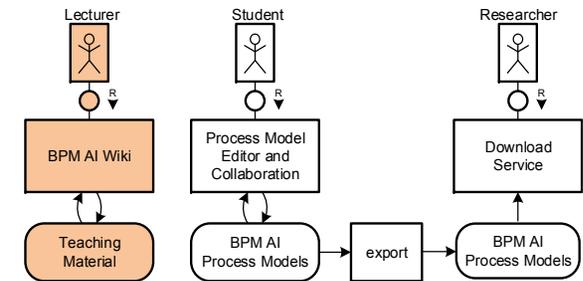


Teaching Material

Textbooks on BPM are available, yet mastering a subject requires practice and exercise.

- comprehensive collection of assignments in the field of BPM, e.g.,
 - understand and create process models
 - analysis of process models

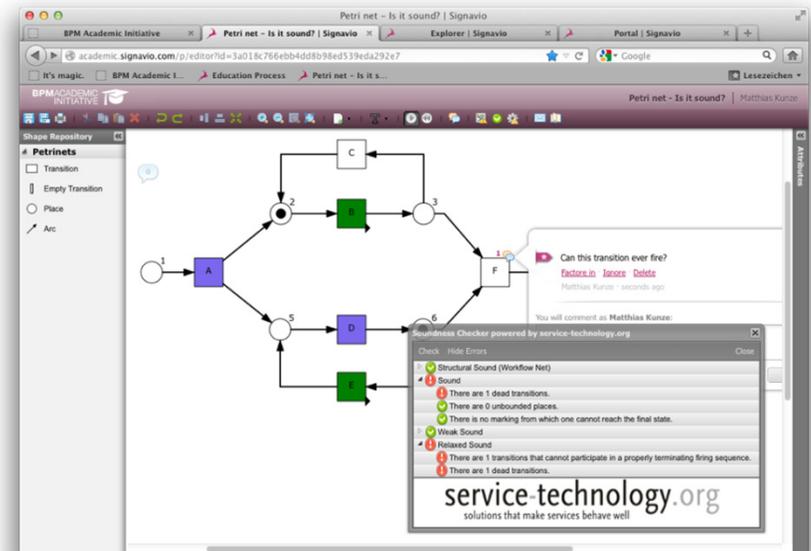
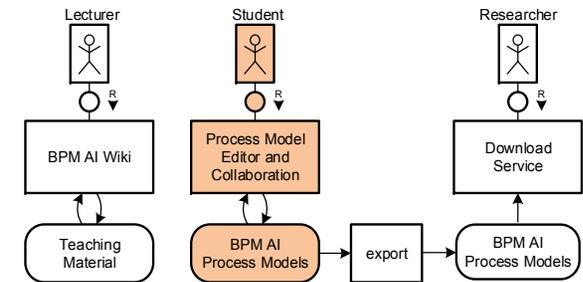
- contributions from academic partners of the initiative
 - organized by topic, searchable
 - licensed under CC: Attribution (BY), Non-Commercial (NC), Share-Alike (SA)



Process Model Editor

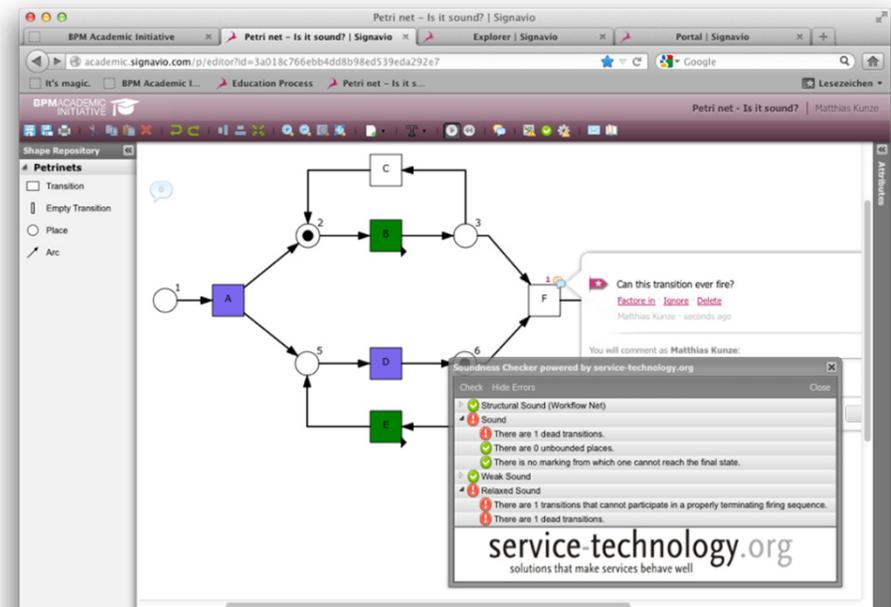
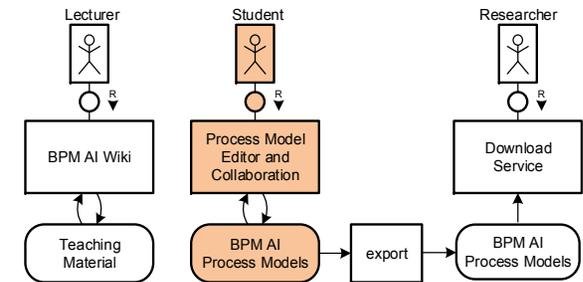
Academics can use the Signavio process model editor free of charge.

- web-based, no installation required
- supports various process modeling notations
- incorporates scientific analysis tools, e.g.,
 - soundness checking,
 - process model structuring
- provides collaboration features
 - sharing of models
 - version history
 - discussing and feedback



BPM Academic Initiative Numbers

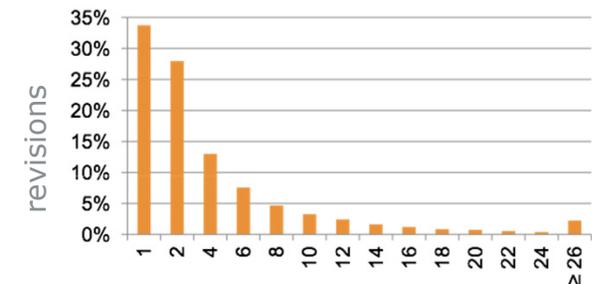
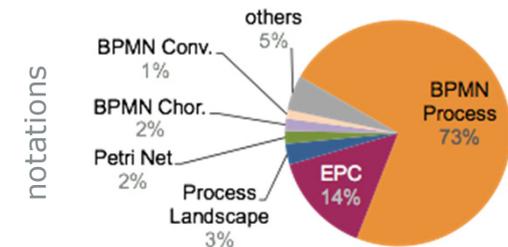
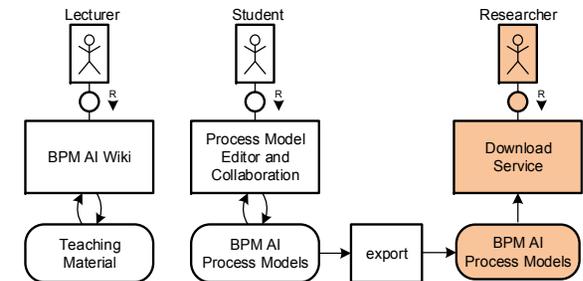
- 25000 registered users
- 13500 work spaces
- 110000 BPMN process diagrams
- 3000 Chor diagrams
- 25000 EPCs
- 5600 UML class diagrams
- 2700 Use case diagrams
- 7500 Process landscapes



Models Available for Empirical Research

Lecturers and students have created thousands of models.

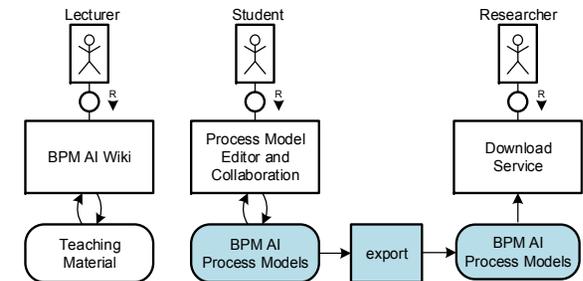
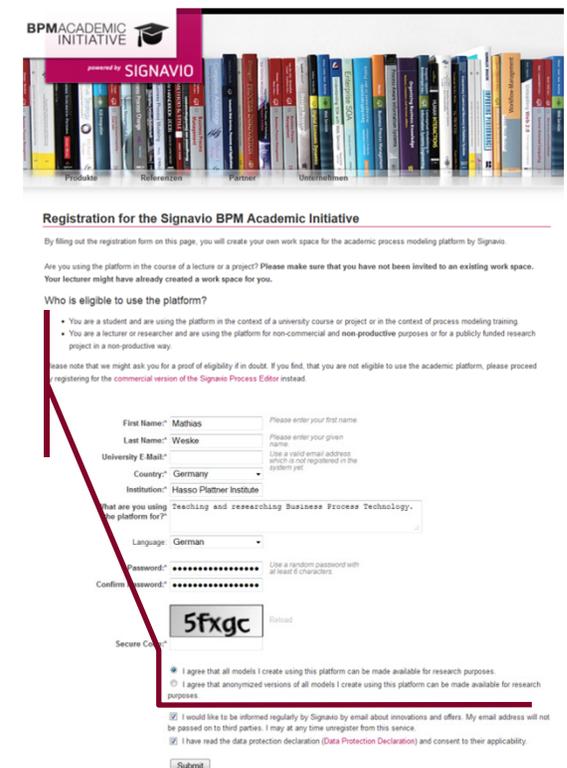
- we make them available for empirical research
 - various modeling languages
 - diverse in size (number of elements)
 - comprise complete revision history
- developed a download portal for the collection
 - explore and filter models for download
 - open-source analysis platform for models



The Small Print

Upon registering for a free account of the process model editor, users agree to provide their models for empirical research.

- users can choose their models to be anonymized
 - periodic update of model collection from academic process models
- I agree that all models I create using this platform can be made available for research purposes.
 I agree that anonymized versions of all models I create using this platform can be made available for research purposes.

BPMACADEMIC INITIATIVE
powered by **SIGNAVIO**

Registration for the Signavio BPM Academic Initiative

By filling out the registration form on this page, you will create your own work space for the academic process modeling platform by Signavio.

Are you using the platform in the course of a lecture or a project? Please make sure that you have not been invited to an existing work space. Your lecturer might have already created a work space for you.

Who is eligible to use the platform?

- You are a student and are using the platform in the context of a university course or project or in the context of process modeling training.
- You are a lecturer or researcher and are using the platform for non-commercial and non-productive purposes or for a publicly funded research project in a non-productive way.

Please note that we might ask you for a proof of eligibility if in doubt. If you find, that you are not eligible to use the academic platform, please proceed registering for the commercial version of the Signavio Process Editor instead.

First Name: Mathias
Last Name: Weske
University E-Mail:
Country: Germany
Institution: Hasso Plattner Institute
That are you using the platform for? Teaching and researching Business Process Technology.
Language: German
Password:
Confirm password:
Secure Code: 5fxgc

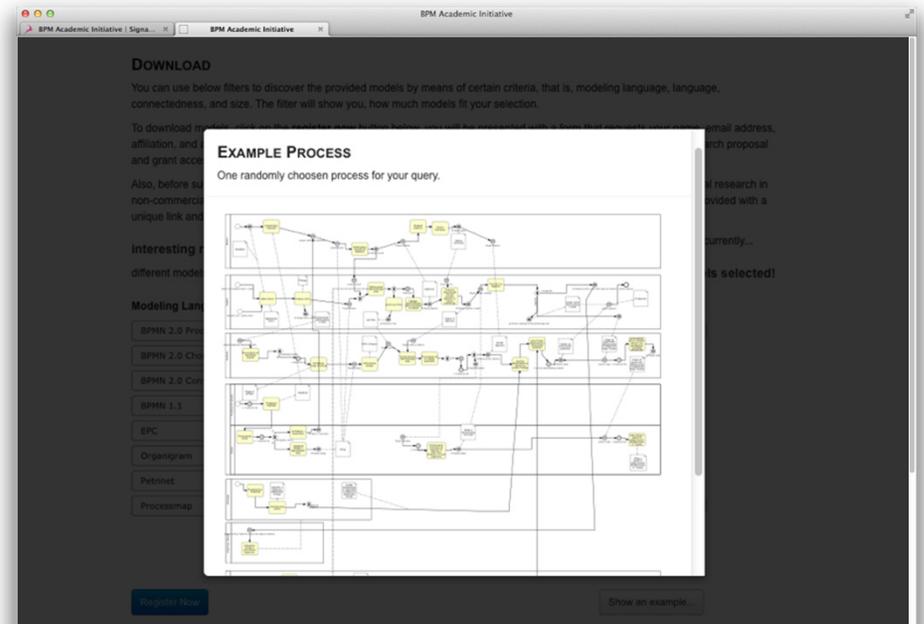
I agree that all models I create using this platform can be made available for research purposes.
 I agree that anonymized versions of all models I create using this platform can be made available for research purposes.

I would like to be informed regularly by Signavio by email about innovations and offers. My email address will not be passed on to third parties. I may at any time unsubscribe from this service.
 I have read the data protection declaration (Data Protection Declaration) and consent to their applicability.

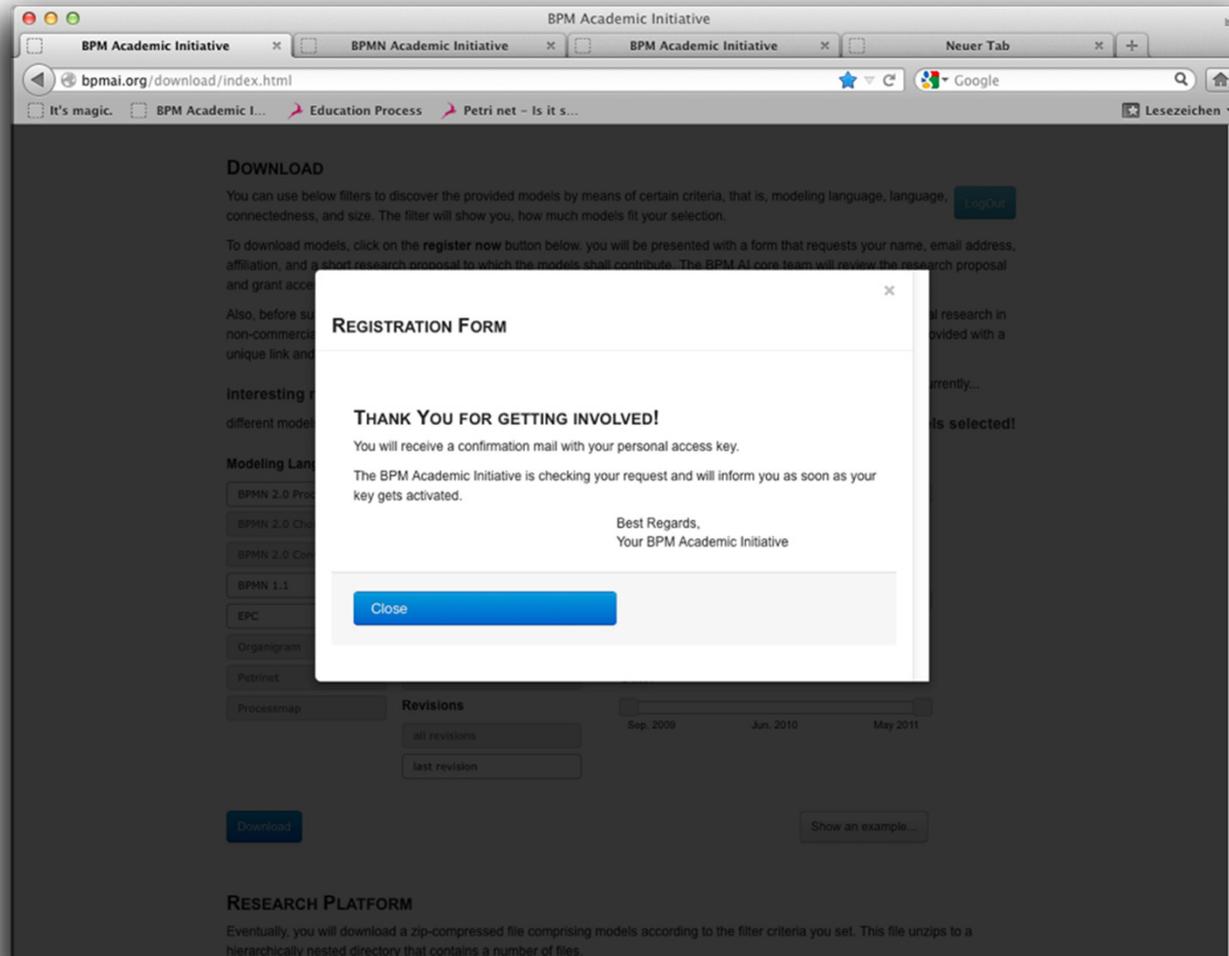
Model Availability

We set up a download portal, where models can be obtained from

- filter among several criteria
 - modeling language
 - language of text
 - quality, size, date
 - browse examples
 - download version history as well
-
- users must provide a research proposal and agree to license terms: non-commercial use in academic context only!



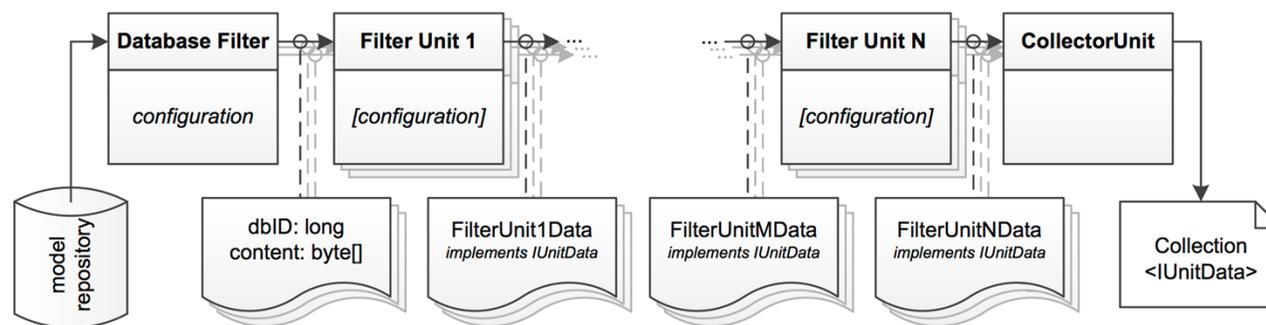
Research Proposal



Tool Set for Empirical Research

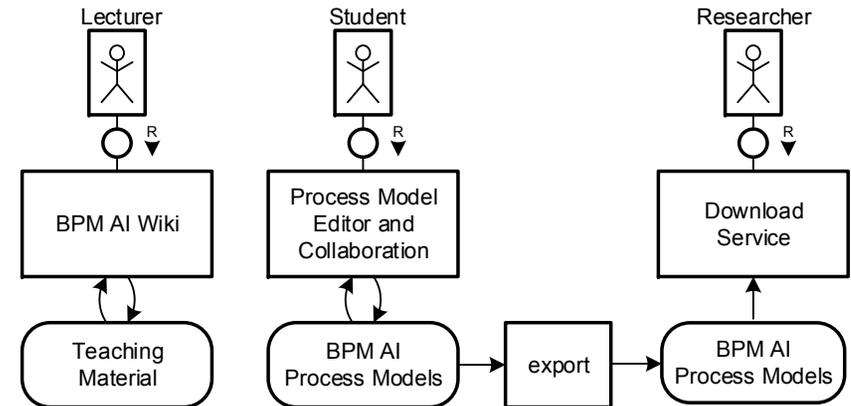
Analysis of process model collections requires many steps:

- load models; parse, transform, and extract information; execute the actual analysis
 - PromniCat – open source analysis
 - simple & efficient pipes-and-filter architecture
 - jBPT – open source library for the formal analysis of business process models



Conclusions

- BPMAI is a successful model (!) regarding education in BPM
 - Availability of modeling tool
 - Availability of teaching material
- Interest in empirical research platform could be higher



BPM Academic Initiative

CREATE PROCESS MODELS

Creating BPMN models, given a textual description of a process, can best be practiced using a domain the modeller is familiar with. In the context of university classes, one can resort to scenarios provided below models.

EXERCISE 1: HOSPITAL PROCESS

A hospital wants to establish a using workflow for their doctors. To make the workflow reliable two different roles are assigned. The first one is a referee from the more crowded quality assurance department while the second one represents the managing director of the hospital. Both roles execute all of their tasks independently from each other.

Visualize the business process using BPMN.
Download the exercise: [doc.pdf](#)

EXERCISE 2: INSURANCE PROCESS

Consider the following business process at an insurance company. The process includes two major roles, agents supporting customers' activities and claims work requests. When the insurance company receives a new claim, the clerk calls the agent to actually check the claim, and creates a new case.

Visualize the business process using BPMN.
Download the exercise: [doc.pdf](#)

EXERCISE 3: COMPUTER REPAIR

The workflow of a computer repair service (CRS) can be described as follows. A customer brings in a defective computer and the CRS checks the defect and hands out a repair cost calculation back. If the customer decides that the costs are acceptable, the process continues, otherwise the agent leaves the computer home completed.

Visualize the business process using BPMN.
Download the exercise: [doc.pdf](#)

EXERCISE 4: BICYCLE MANUFACTURING

A small company manufactures customized bicycles. Whenever the sales department receives an order, a new process instance is created. A member of the sales department can then request or accept the order for a customized bike. In the former case, the process instance is finished. In the latter case, the storehouse and the engineering department are informed.

