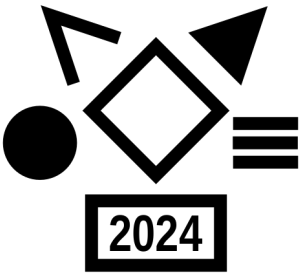
DEClarative, DECision and Hybrid approaches to processes (DEC2H 2024)



To be held in conjunction with BPM 2024

Call for Papers

In this workshop, we are interested in the application and challenges of decision- and rule-based modelling in all phases of the BPM lifecycle: identification, discovery, analysis, redesign, implementation and monitoring.

Rules and decisions define the behavioural constraints and factors determining the achievement of process goals. Business processes frequently involve rule-bound decisions – particularly knowledge-intensive processes, which operate in highly variable contexts and are thus flexible by nature. When describing such processes, variability and flexibility call for explicit statements of the underlying rules and decisions.

While traditional notations such as BPMN excel at describing "happy paths", they may fall short when modelling flexible and varying rules and decisions, wherein procedural models tend to clutter and become imprecise or impractical. Declarative modelling paradigms aim to directly capture the business rules or constraints underlying the process and thus tackle this challenge. A promising direction is the hybridisation of procedural and declarative approaches. This workshop invites work within these topics, adopting existing formalisms (e.g., DMN, Declare, DCR, CMMN, GSM, eCRG, or DPIL) or establishing new ones. Contributions may include completed work (research, case studies and tools) and work-in-progress and position papers.

Purpose

The purpose of the workshop is:

- to examine the relationship between rules, decisions and processes, including **models; not only to model the process** but **also to model the rules and decisions**;
- to enhance **rule and decision mining** based on process data (e.g. event logs);
- to examine decision **goals, structures**, and their connection with business **processes**, in order to find a good integration between rule- and decision-based modelling and flow-based modelling;
- to examine **standards** (DMN, CMMN, BPMN) and their integration;
- to study how different process models can be **designed** to fit a decision process according to various optimisation criteria, such as throughput time, use of resources, etc.;
- to study the **integration** between different modelling paradigms;
- to show **best practices** in separating process, rule and decision concerns.

Topics of interest

Topics of interest include, but are not limited to:

Declarative and hybrid (process modelling) approaches

- Declarative notations (DCR, Declare, GSM, eCRG, DPIL, …)
- Decision & goal notations (DMN, PDM, …)
- Case management notations (CMMN, fCM, …)
- Hybrid notations
- Declarative and hybrid modelling methodologies
- Process metrics
- Process maintenance and flexibility
- Human-centered and flexible processes
- Decision rules and processes
- Decision models and structures
- Formal analysis (e.g., expressiveness proofs) of declarative and hybrid notations
- Formal verification (e.g. model-checking and static analysis) of declarative and hybrid models

- Run-time adaptation of declarative and hybrid process models

Decision mining and declarative/hybrid process mining

- Decision mining
- Declarative process mining
- Hybrid process mining
- Data mining for decision and declarative/hybrid process analysis
- Rule mining for decision and declarative/hybrid process analysis

Applications of decision- and rule-modelling in BPM

- Goal-driven processes
- Knowledge-intensive processes
- Business process compliance
- Knowledge workflow management
- Usability and understandability studies
- Case studies
- Tools

Format of the Workshop

The workshop will begin with a keynote, followed by presentations of accepted papers. Full papers have 20 minutes for their presentations and 10 minutes for discussion and Q&A. Short papers have 10 minutes for their presentations and 10 minutes for discussion and Q&A. In addition, we will host a Killer Debate session, where selected members of the community will argue for and against controversial statements in interaction with the audience. Topics and speakers will be nominated by the community before the workshop, and at the workshop the audience can vote on the most convincing arguments.

Each manuscript will be reviewed by at least three program committee members guaranteeing that only papers presenting high-quality work and innovative research in areas relevant to the workshop theme will be accepted. Full papers that are not accepted, yet reviewed positively, may still be invited for presentation as a short paper at the workshop.

Accepted papers will appear in the workshop post-proceedings. Full papers will be published by Springer in the Lecture Notes in Business Information Processing (LNBIP) series. Short papers will be published in a CEUR proceedings volume. For each format a single volume will be dedicated to the combined proceedings of all BPM workshops. During a time window after the conference, the workshop participants will be granted the free download of the papers.

At least one author of each accepted manuscript is required to register for the workshop and present the paper. Registration is subject to the terms, conditions and procedures of the main BPM 2023 conference to be found on its website.

Submission

We are interested in the following paper categories, either in **full** (not exceeding **12 pages**) or **short** (minimum of **5 pages** and not exceeding **10 pages**) **format**.

Research and **work-in-progress** papers describe original research work in the broad area of declarative, decision and hybrid approaches to processes. Such papers can report on complete technical work or early results that show promise but require more work to get to full maturity.

Case-study papers report on case studies and industrial applications of declarative, decision and hybrid approaches to processes. Papers in this category are expected to clearly describe the case being studied, the methodologies used, and their implications for relevant research problems.

Tool papers describe novel tools supporting declarative, decision and hybrid approaches to processes. Papers in this category will be evaluated based on the novelty and maturity of the tools presented and authors are expected to include artefacts such as links to a demo version of the tool and video tutorials.

Position or **vision** papers (**limited to the short format**) discuss a novel problem or idea related to the topics of the workshop and can be used as an opportunity to foster discussion at the event and reach out to interested

collaborators. Papers in this category will be evaluated with a focus on their novelty and potential to foster an engaged discussion at the workshop.

The final selection of papers will be based on the paper format (full or short), with each paper reviewed according to the expectations for their category.

Only papers in English will be considered. Submitted papers must present original research contributions not concurrently submitted elsewhere. Authors are requested to prepare submissions according to the LNBIP format specified by Springer (instructions) for long papers, or the single-column CEUR-ART format (instructions) for short papers. The title page must contain a short abstract and a list of keywords, preferably using the topics given above.

Papers must be submitted electronically via EasyChair: enter the main conference installation (BPM 2024) at easychair.org/conferences/?conf=bpm2024 and select "*BPM 2024 Workshop on Declarative, decision and hybrid approaches to processes*" as the submission track.

Important Dates

- Abstract submission deadline (optional): 30 May 2024
- Papers submission deadline: 7 June 2024
- Notification: 5 July 2024
- Camera-ready deadline: 19 July 2024
- Workshop: 2 September 2024

Contact

Contact the organisers at the following e-mail address: DEC2H@easychair.org

Organisers

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