

Exploitative and Explorative Business Process Improvement

Research Seminar in the Module 10-202-2309
for Master Computer Science

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Some Conceptual Points

We are faced in the sessions of our seminar with several concepts related to Business Processes:

- ▶ BP Modelling
- ▶ BP Landscaping
- ▶ BP Execution
- ▶ BP Management
- ▶ BP Improvement

What is the relation between these concepts? How they are contextualised? What is the relation to system concepts?

Business Process Management

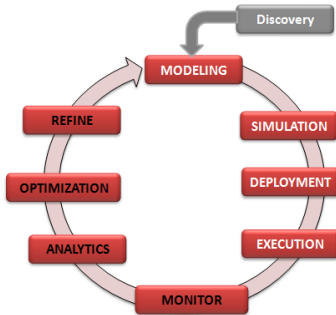
(Lindskog 2018):

- ▶ BP Management (BPM) = the body of methods, techniques, and tools to discover, analyze, redesign, execute and monitor business processes.
- ▶ BPM has traditionally focused on increasing the efficiency and effectiveness of business processes through exploitation, standardization or automation.
- ▶ 60–80% of BPM initiatives have been fruitless.
- ▶ Unlike *exploitation*, which is driven by current practices, *exploration* is focused on possible future process practices.

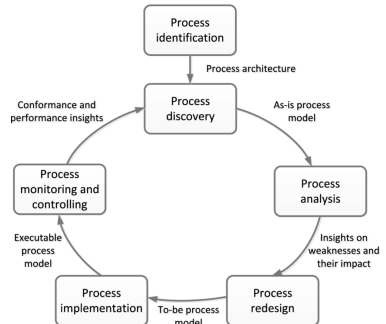
In this sense, BPM is the management of the feedback loop between the *BP model* and the *real processes*.

BPM Lifecycle

BPM is the process of alignment between model and reality, which is usually *modelled as BPM lifecycle* (as a *model* of alignment of model and reality).



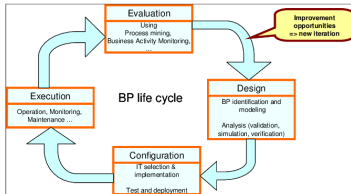
(Meidan et al. 2016)



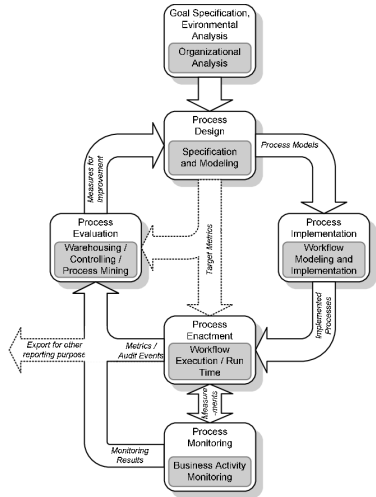
(Meroni 2018)

BPM Lifecycle

There exist different models of that lifecycle.



(Ruiz et al. 2012)



(Muehlen, Ho 2005)

Business Process Improvement

Business Process Improvement (BPI) thus corresponds to the systemic developmental step from the *System as is* to the *System as required* in its dialectical contradictoriness, as explained in more detail in the lecture.

Here, too, a distinction must be made between the **real transformation step** and the **modelling of this step**.

Business Process Improvement

(Rosemann 2020)

Exploitative process improvement is dedicated to process efficiency and effectiveness within a given value proposition. Related approaches are either comprehensive methodologies (e.g., Lean Management, Six Sigma, Theory of Constraints, Business Process Reengineering) or sets of fine granular, operational improvement heuristics.

The former tend to concentrate on the issue identification and are either light and unstructured (e.g., brainstorming) or very narrow (e.g., how to overcome variation) in terms of suggesting actual improvements.

Explorative Process Improvement

The latter are grounded in the tradition of TRIZ, i.e. the theory of the resolution of invention-related tasks, which proposed a set of generalizable solution patterns. Examples for such process improvement patterns are elimination (delete an activity), integration (merge two activities), automation (of an activity) or optionality (make an activity optional for some process stakeholders).

Explorative process improvement: An operationally efficient process can become obsolete when the value proposition of the business process is threatened and the process itself ultimately could become nonrelevant.

Revenue resilience (as a **design paradigm** – Rosemann) describes the capability to sufficiently defend and grow the revenue base in light of disruptive forces.

Explorative Process Improvement

The aim of explorative BPM, the search for new value, is comparable to the **intentions of a business model**, i.e. a description of how an organization creates, captures and monetizes value.

Explorative process design patterns complement a business model by

- (1) providing an explicit view on processes as a source of new value, and
- (2) shifting the dominating focus of exploitative BPM, which concentrates on **cost structures**, to the study of how business process explorations can lead to **new revenue streams**.

Explorative Process Improvement

Rosemann proposes seven Explorative Process Improvement Design Patterns

- ▶ Process Generalisation
- ▶ Process Expansion
- ▶ Process Differentiation
- ▶ Process Initiation
- ▶ Process Commercialisation
- ▶ Process Integration
- ▶ Process Attention