# Chapter 14
# Epilogue

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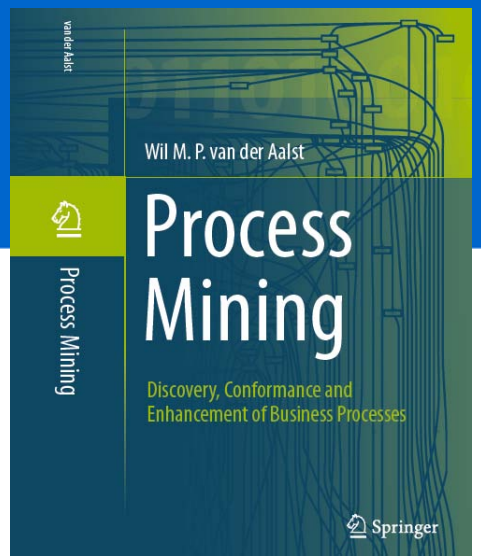


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**Where innovation starts**

# Overview

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*Part I: Preliminaries*

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Process Modeling and Analysis

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Data Mining

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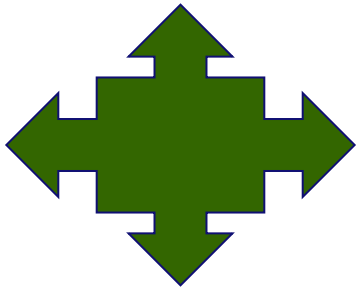
# Process Mining: A bridge between data mining and business process management

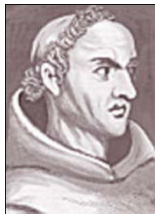
# Challenge: process discovery

**Fitness: Is the event log possible according to the model?**

**Precision: Is the model not underfitting (allow for too much)?**

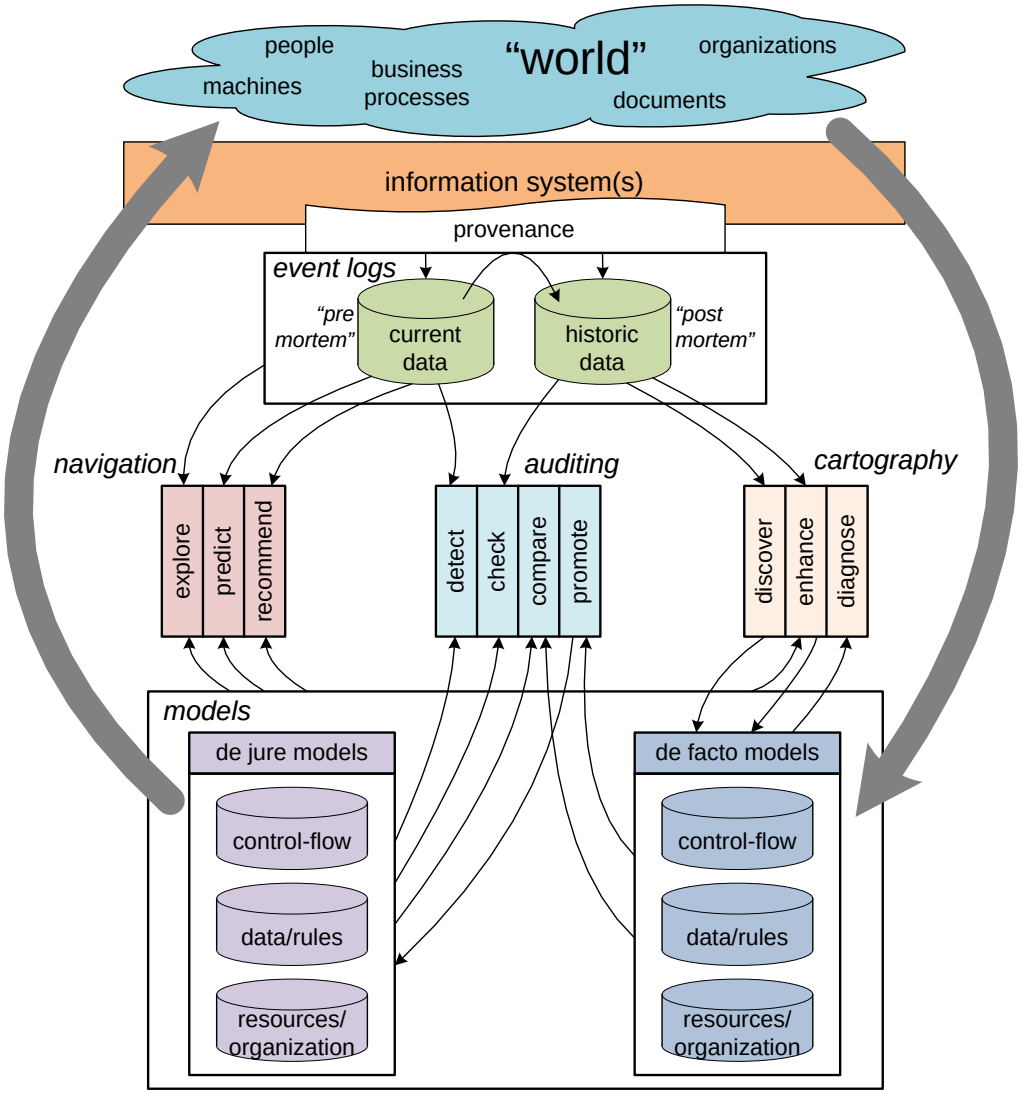


**Generalization: Is the model not overfitting (only allow for the “accidental” examples)?**



**Structure: Is this the simplest model (Occam's Razor)?**

# Challenge: supporting the whole process mining spectrum





# Start Today!


- The threshold to start an (off-line) process mining project is really low.
- Most organizations have event data hidden in their systems.
- Once the data is located, conversion is typically easy. For instance, software tools such as ProMimport, Nitro, XESame, and OpenXES support the conversion of different sources to MXML or XES.
- The freely available open-source process mining tool ProM can be downloaded from www.processmining.org. ProM can be applied to any MXML or XES file and supports all of the process mining techniques mentioned.

**Experience the “magic” of process mining, i.e., discovering and improving processes based on facts rather than fiction!**

Wil M. P. van der Aalst

# Process Mining

## Discovery, Conformance and Enhancement of Business Processes

More and more information about business processes is recorded by information systems in the form of so-called "event logs". Despite the omnipresence of such data, most organizations diagnose problems based on fiction rather than facts. Process mining is an emerging discipline based on process model-driven approaches and data mining. It not only allows organizations to fully benefit from the information stored in their systems, but it can also be used to check the conformance of processes, detect bottlenecks, and predict execution problems.

Wil van der Aalst delivers the first book on process mining. It aims to be self-contained while covering the entire process mining spectrum from process discovery to operational support. In Part I, the author provides the basics of business process modeling and data mining necessary to understand the remainder of the book. Part II focuses on process discovery as the most important process mining task. Part III moves beyond discovering the control flow of processes and highlights conformance checking, and organizational and time perspectives. Part IV guides the reader in successfully applying process mining in practice, including an introduction to the widely used open-source tool ProM. Finally, Part V takes a step back, reflecting on the material presented and the key open challenges.

Overall, this book provides a comprehensive overview of the state of the art in process mining. It is intended for business process analysts, business consultants, process managers, graduate students, and BPM researchers.

**Features and Benefits:**

- First book on process mining, bridging the gap between business process modeling and business intelligence.
- Written by one of the most influential and most-cited computer scientists and the best-known BPM researcher.
- Self-contained and comprehensive overview for a broad audience in academia and industry.
- The reader can put process mining into practice immediately due to the applicability of the techniques and the availability of the open-source process mining software ProM.

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Process Mining

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