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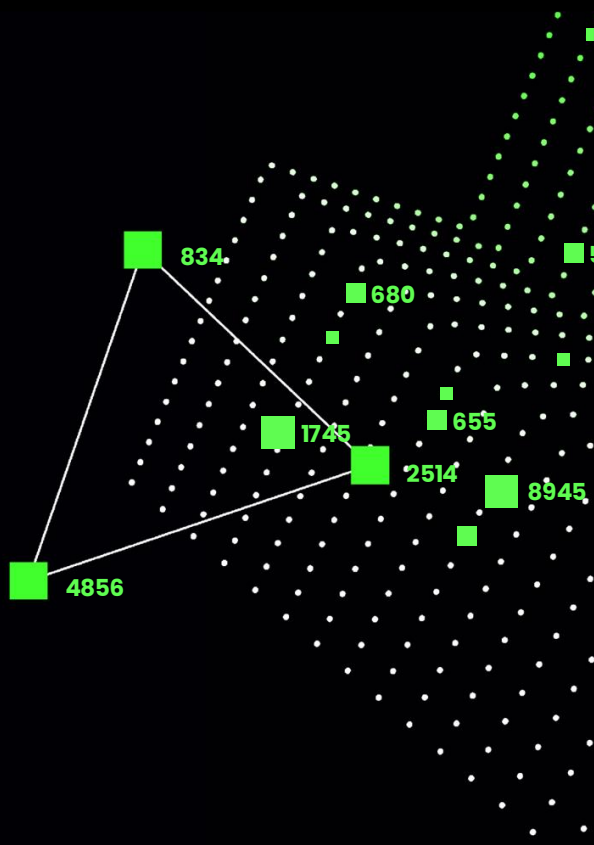
Chair of Process and Data Science | RWTH AACHEN UNIVERSITY

Closing

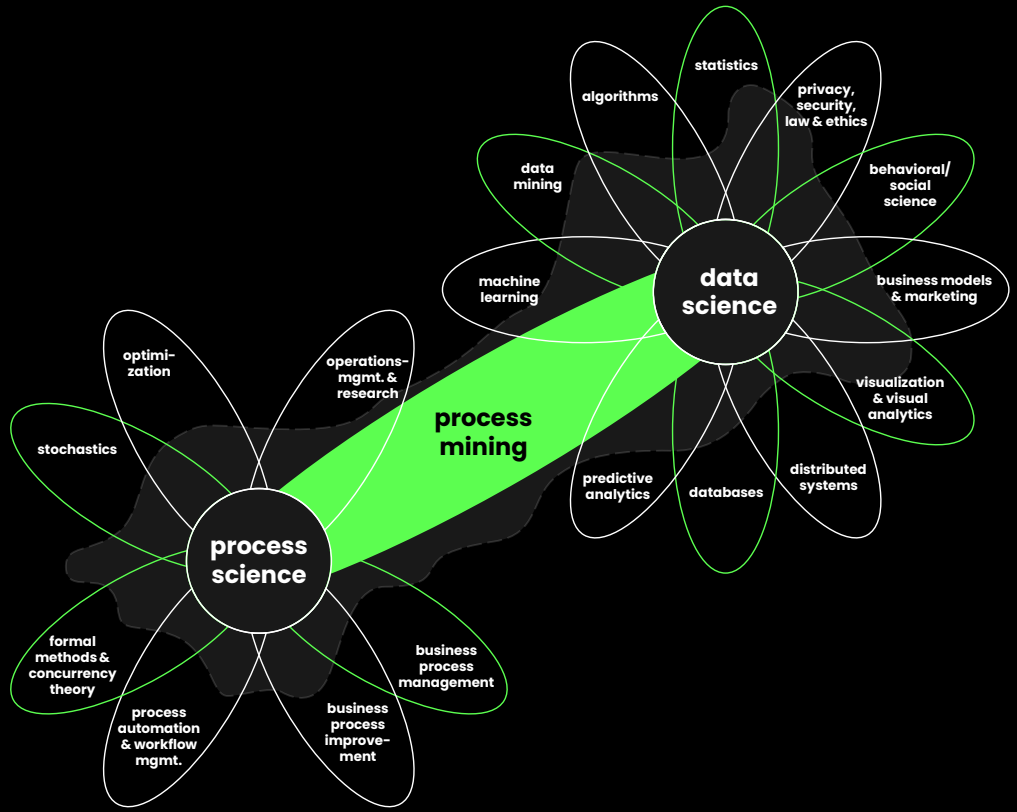
Overview and next steps

Process mining: From Theory to Execution



prof.dr.ir. Wil van der Aalst
www.vdaalst.com @wvdaalst | www.pads.rwth-aachen.de

Process mining as the missing link

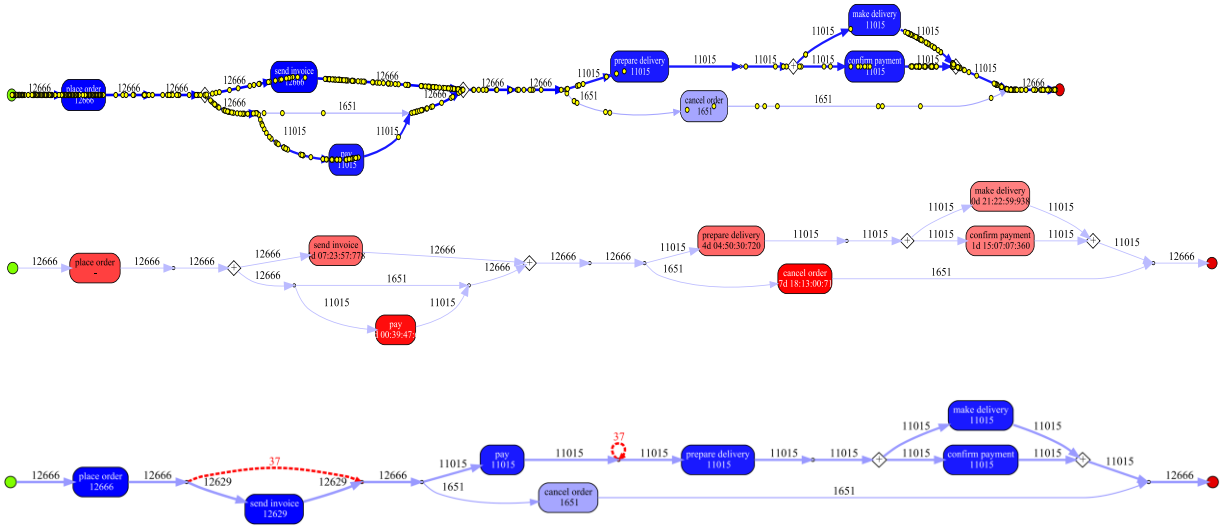


Performance & Compliance

What happens?

Where are the bottlenecks?

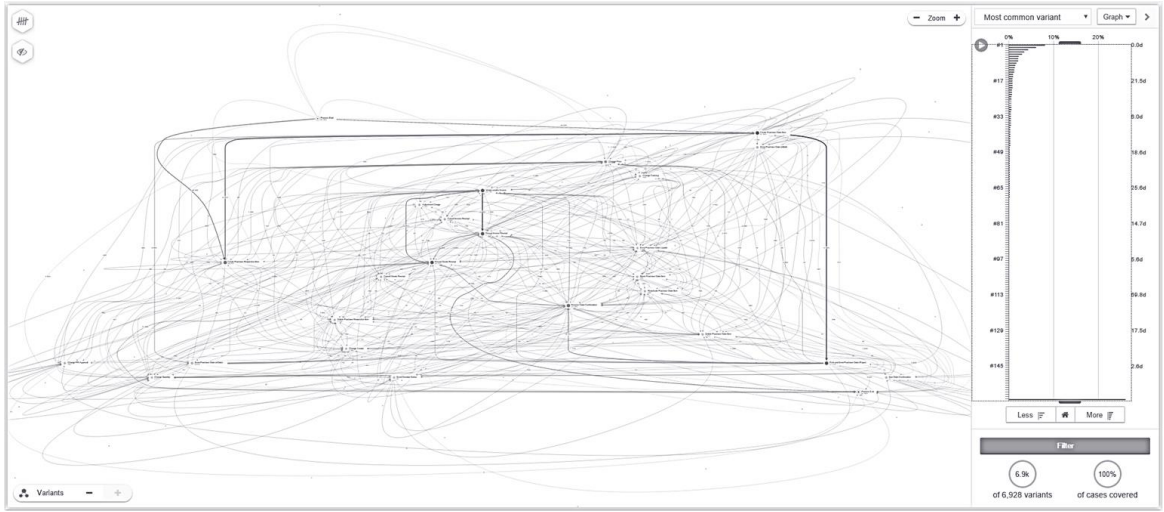
Where do we deviate from the happy path?



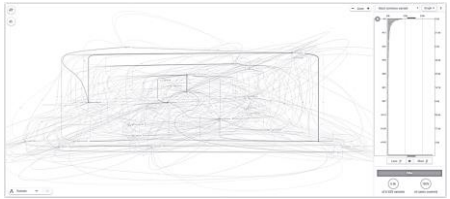
Pareto distribution: 100% of cases

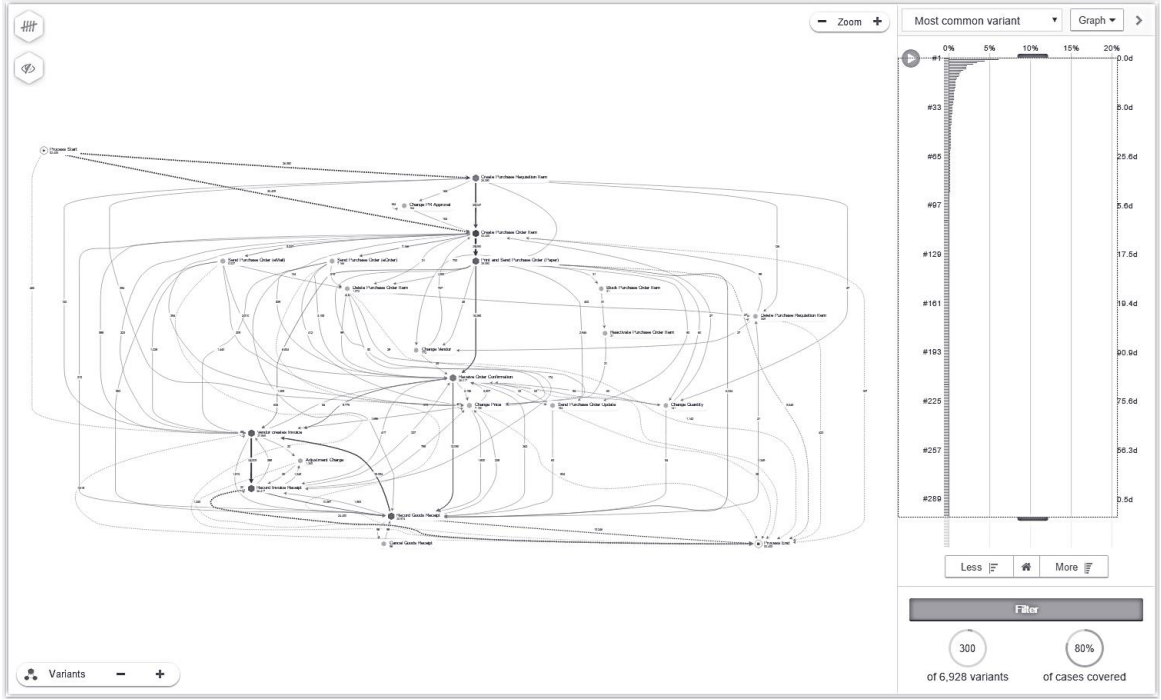
P2P processes with
67,023 cases and
6,928 variants

Huge potential to improve processes and remove organizational friction (e.g., rework and delays)



Pareto distribution: 80% of cases

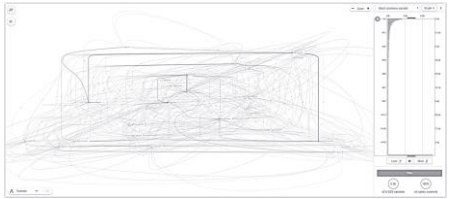


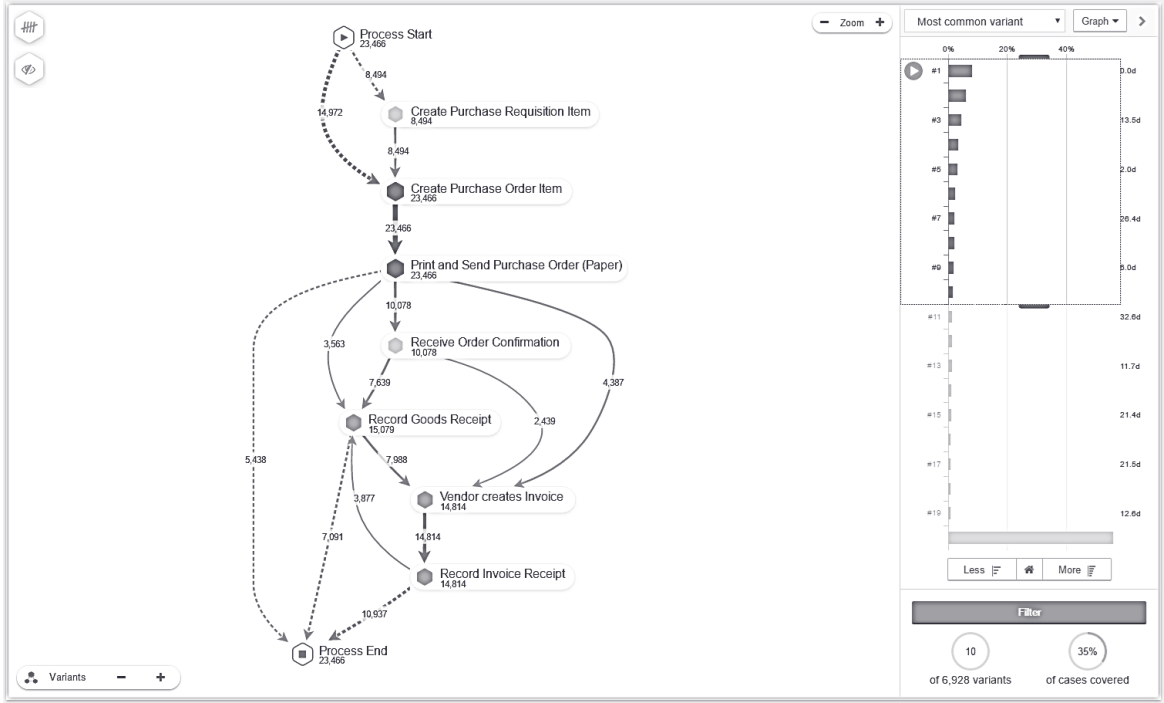


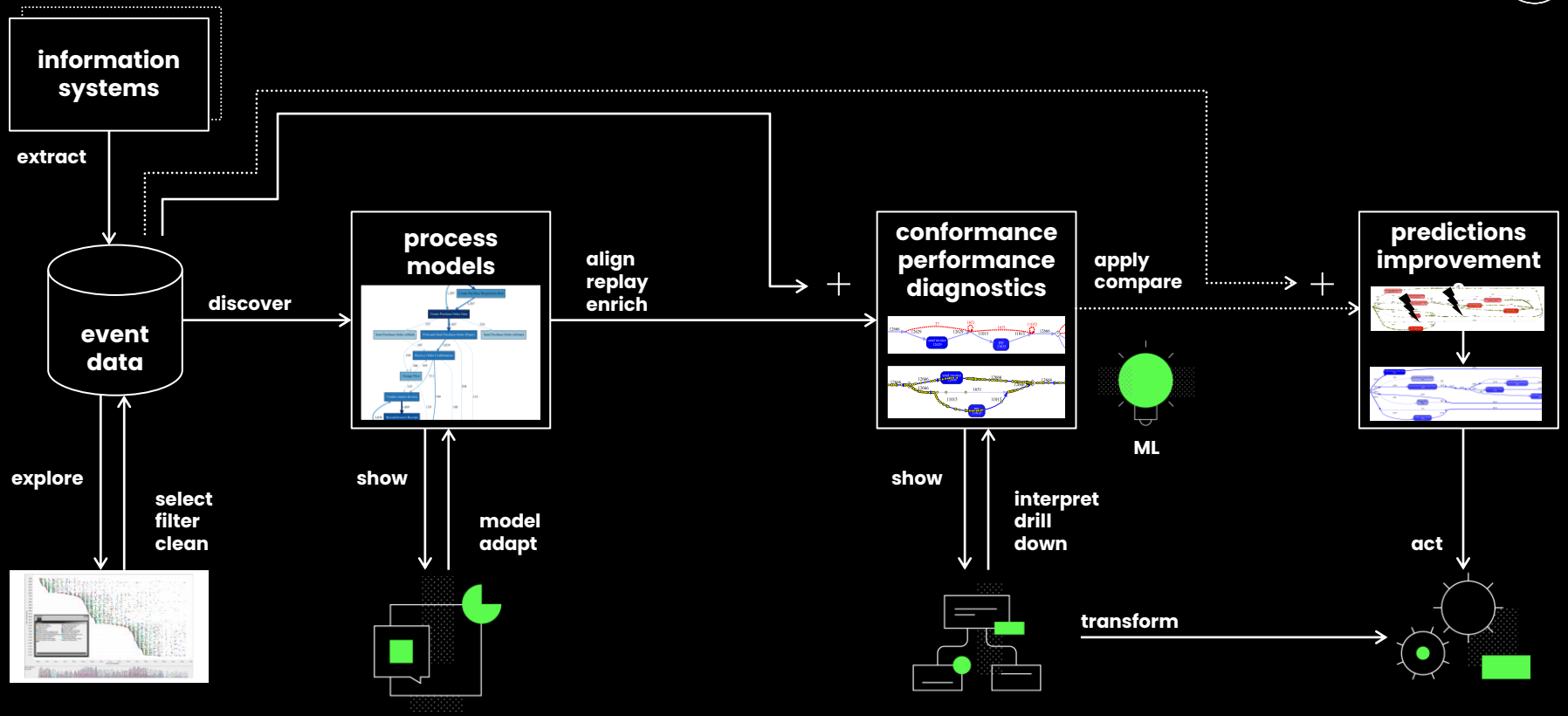
300/6928=4.3%
of variants

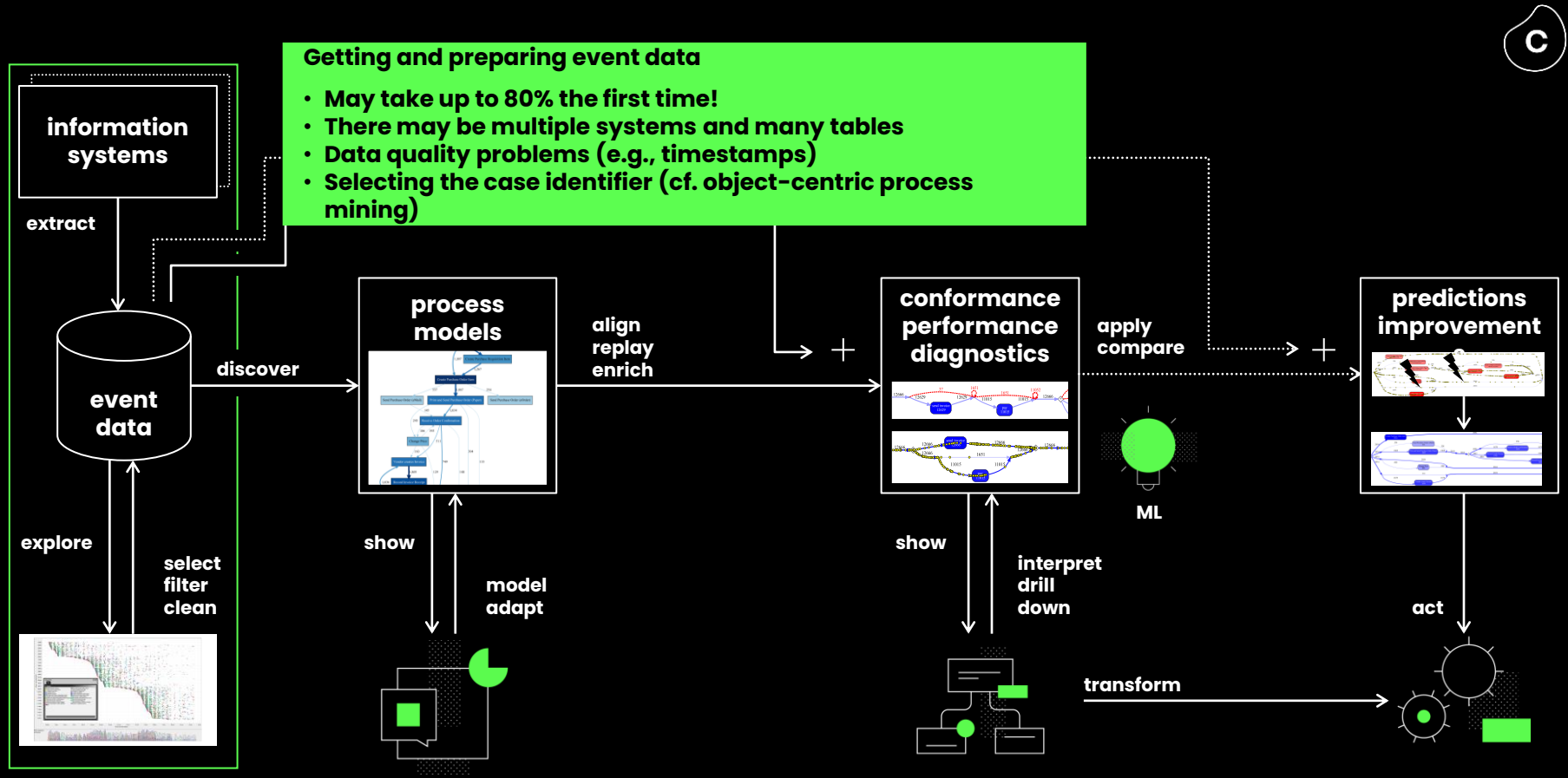
Pareto distribution: 35% of cases

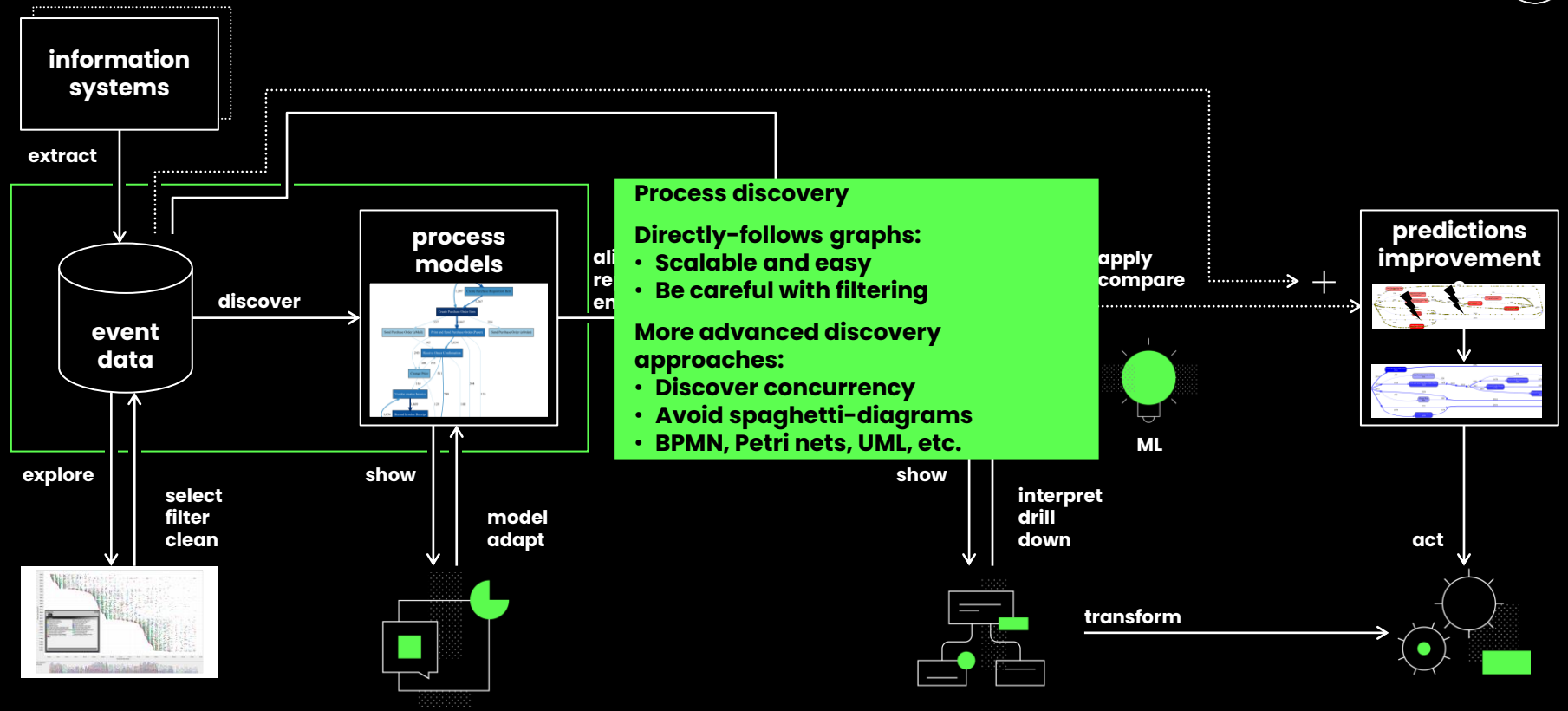
10/6928=0.14%
of variants

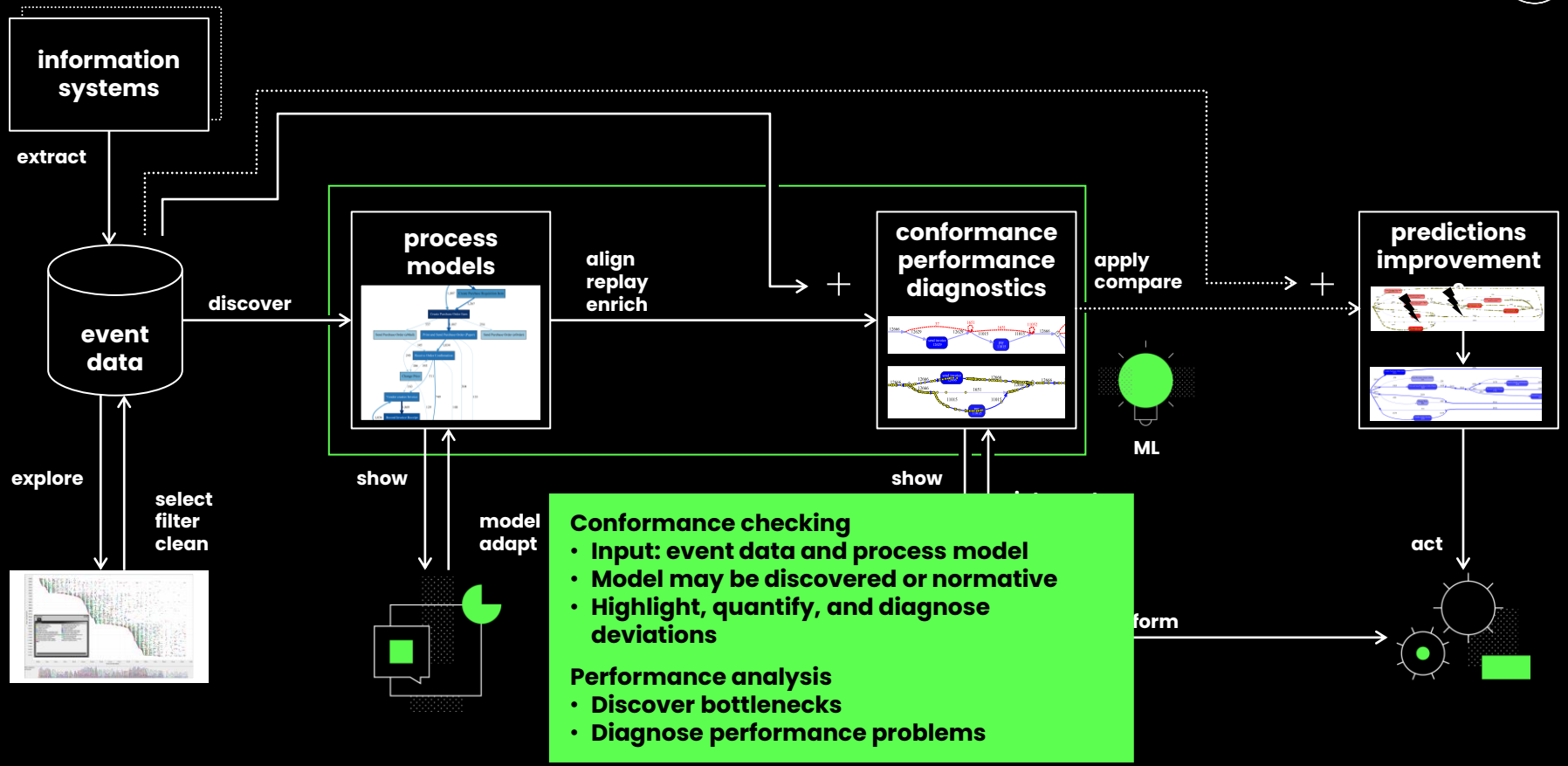


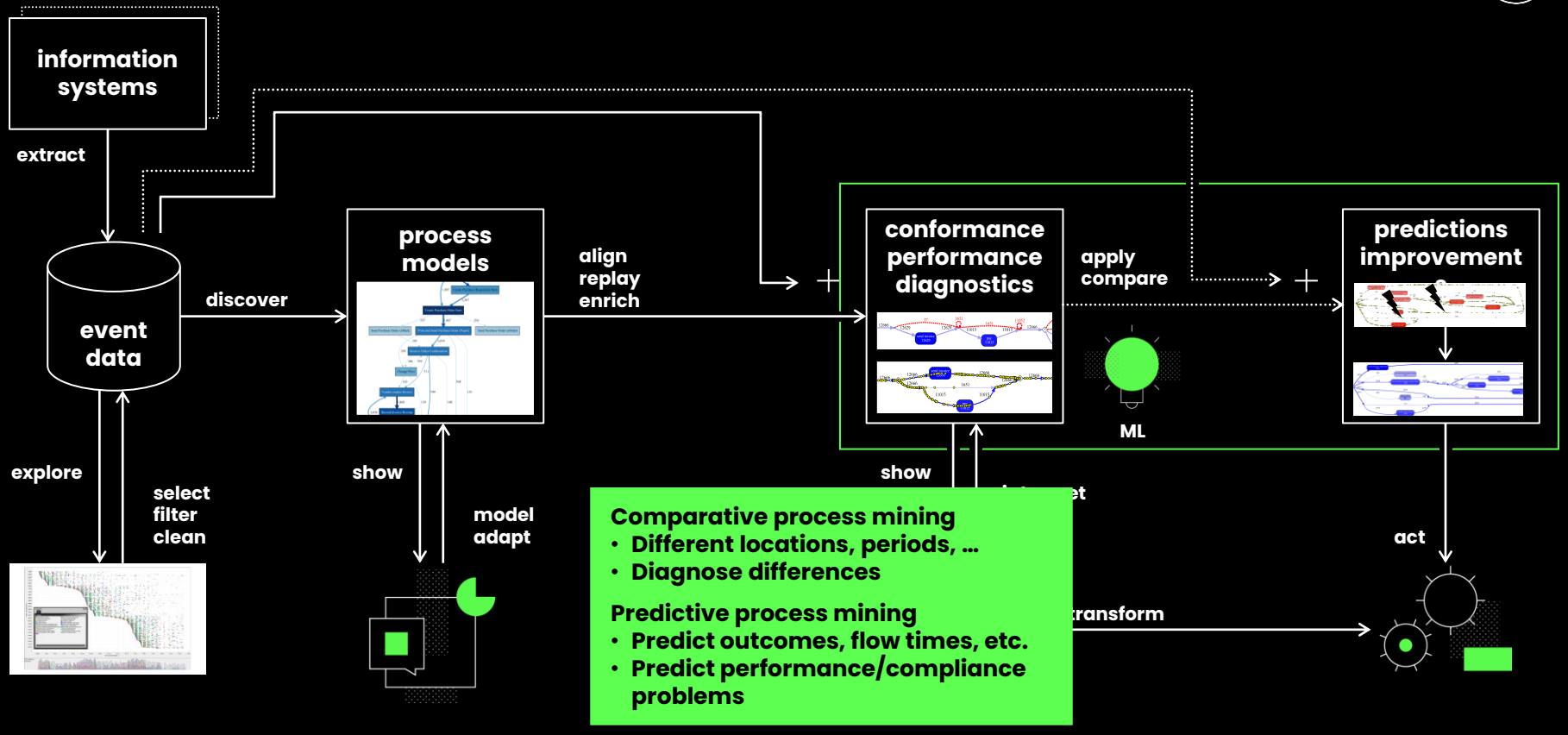












information systems

extract

event data

discover

explore

select
filter
clean

process models

show

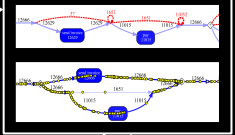
model
adapt

Process improvement
- Create awareness
- Implement changes
  - Information system
  - Organization

Explore alternatives
- Simulation
- Digital twin

Turning data into actions!

conformance performance diagnostics



show

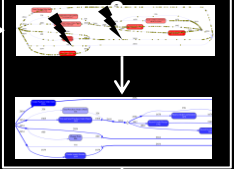
interpret
drill
down

apply
compare

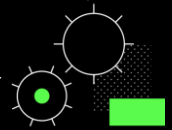
ML

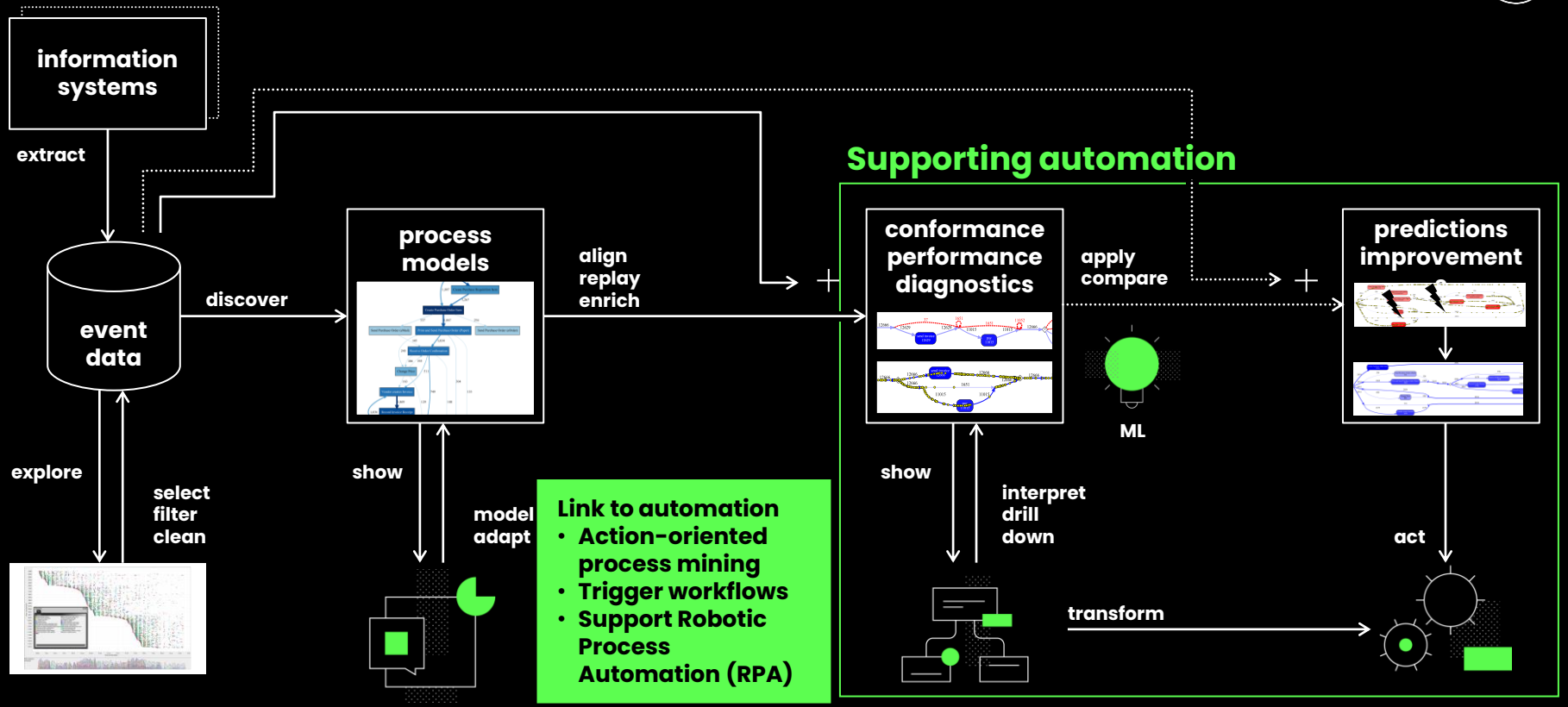
transform

predictions improvement



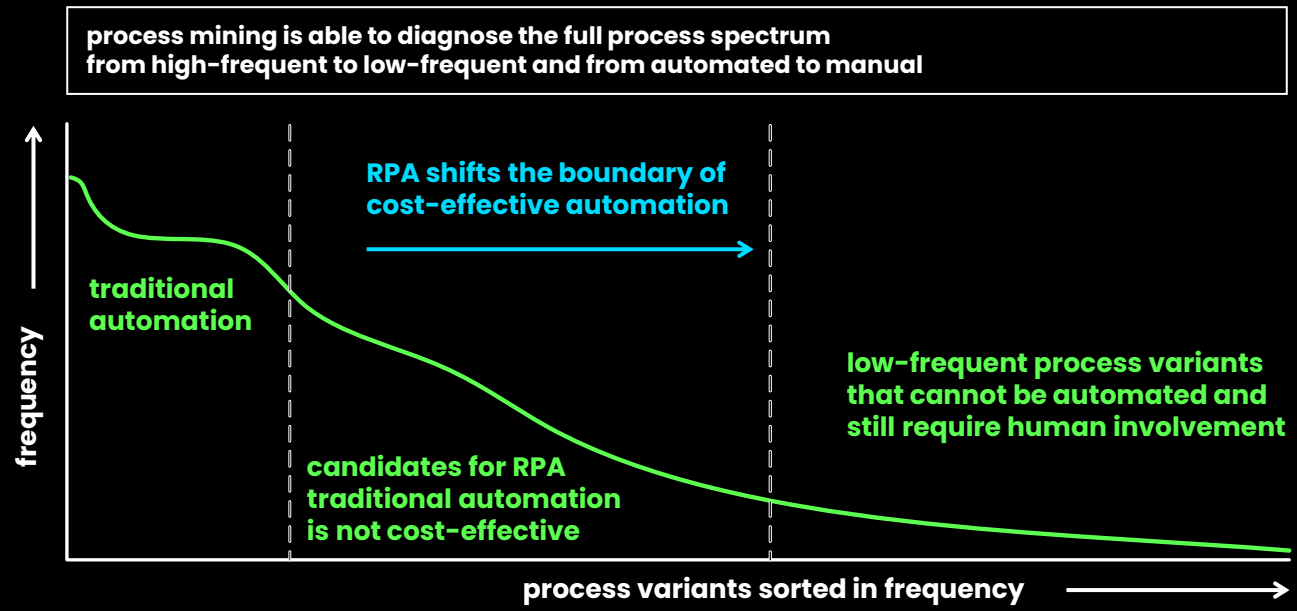
act





RPA

One of many use cases



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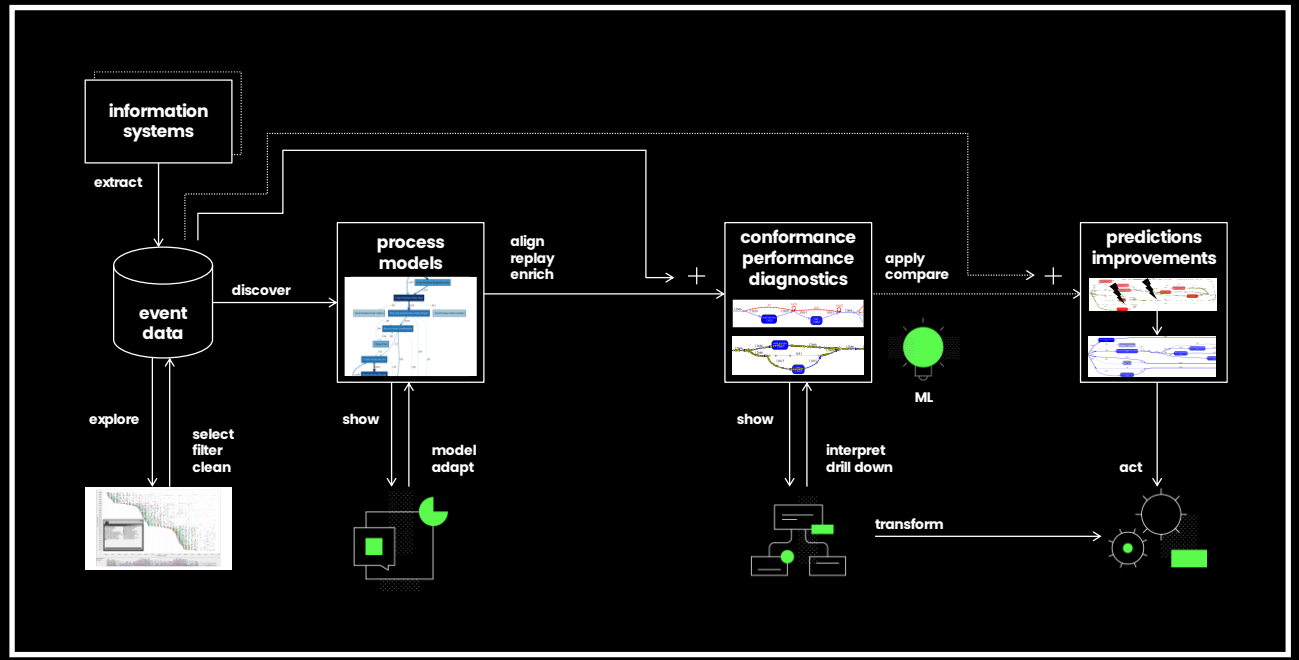

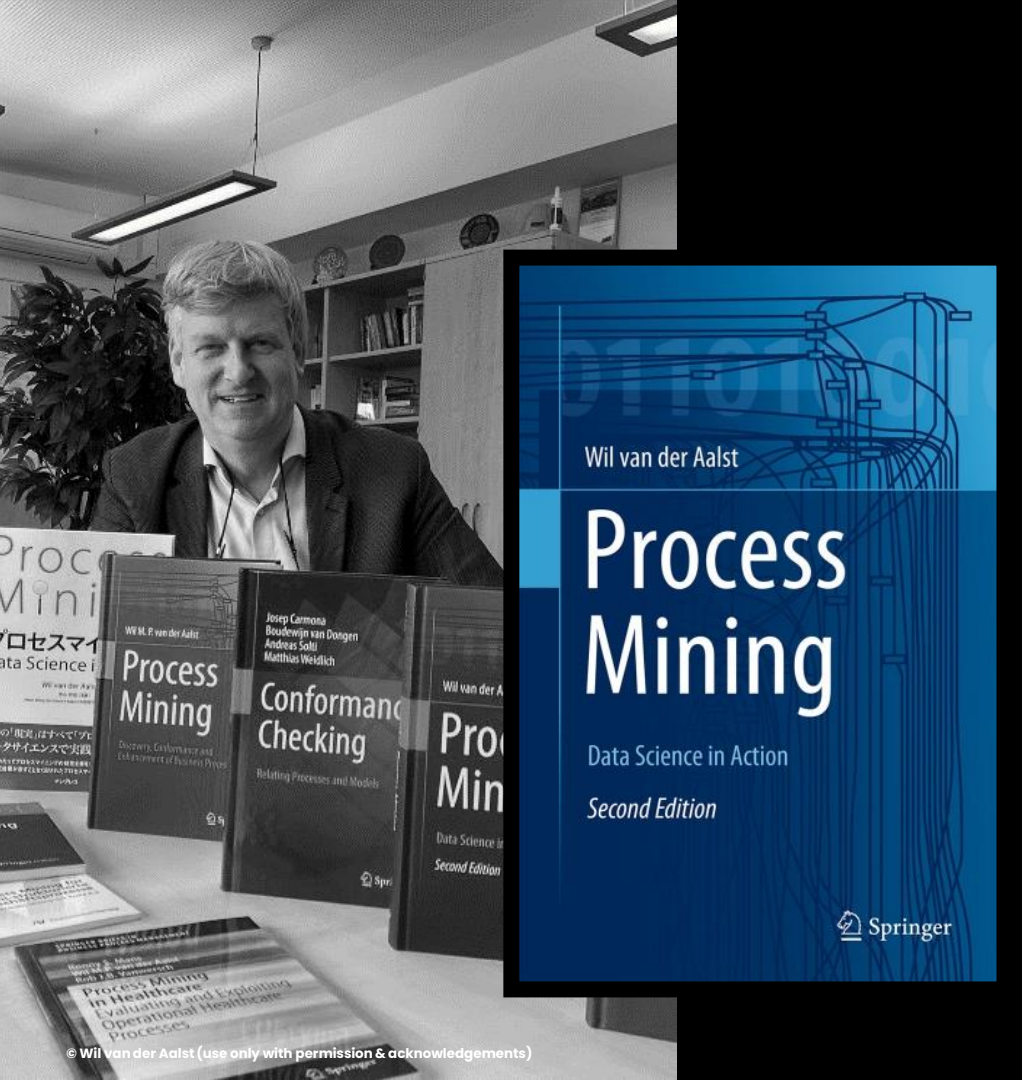

Advance your knowledge

Process Mining: Data Science in Action

The textbook "W. van der Aalst. Process Mining: Data Science in Action. Springer-Verlag, Berlin, 2016" (http://springer.com/9783662498507).