

Process Mining for SME Automation (2021)

Abstract: This paper (2021) investigates process mining for SME automation in the context of BIS. We propose a workflow combining event logs, conformance checking, automation ROI. **Method:** Causal inference with propensity matching. **Dataset:** Public benchmark dataset (n=50,000) plus internal holdout set. **Metrics:** NPV, PPV, sensitivity, specificity.

Methods & Data: Causal inference with propensity matching. Public benchmark dataset (n=50,000) plus internal holdout set.

Results: Results are strong but depend on aggressive preprocessing and exclusion criteria.

Limitations: Small sample size for minority classes; confidence intervals are wide.