Payments-Data Nowcasting — the Bank of Canada's Machine-Learning System for Real-Time Macroeconomic Policy Analysis

AI in the Public Sector · Good practice · Canada

Quality score: 67/100

Evidence strength: Quasi-experimental

Summary

Bank of Canada researchers used ML on payments-system data to nowcast GDP and trade during COVID-19, cutting forecast error 20–40% versus benchmarks in a peer-reviewed 2023 study; a 2026 Bank paper describes this becoming an ongoing, governed AI practice.

Key dimensions

Dimension	Score
Evidence of impact / measured public value	2/3
Transparency, fairness & accountability	2/3
Transferability / demonstrated replication	2/3
Scalability beyond pilot	2/3
Governance, capability & sustainability	2/3

Evaluated by C-NAPSE

Data sources

C-NAPSE web research — accessed 2026-07-13

Bank of Canada (Banque du Canada) — accessed 2026-07-13

Bank of Canada — Staff Working Paper 2021-2 — accessed 2026-07-13

Forecasting (MDPI, peer-reviewed) — Macroeconomic Predictions Using Payments Data and Machine Learning — accessed 2026-07-13

Payments Canada — Nowcasting macroeconomic variables using payments data — accessed 2026-07-13

Bank of Canada — Staff Analytical Paper 2026-17 — accessed 2026-07-13

Cite this — Evidoria. *Payments-Data Nowcasting — the Bank of Canada's Machine-Learning System for Real-Time Macroeconomic Policy Analysis*. Persistent ID: 5ced135f-3b4f-4889-8247-5b8f748627cd.