

RESEARCH REPORT

ROI & Impact

Return on Training: Measuring the Productivity Impact of AI Skills Development in Canadian SMEs

PUBLISHED February 2026

ACCESS Members Only

PUBLISHER CSBAA

EXECUTIVE SUMMARY

A longitudinal study tracking productivity, error rate, and employee confidence metrics across 84 Canadian SMEs before and after structured AI training. The report provides a practical ROI calculation framework that organizations can apply to their own training investment decisions, with sector-specific benchmarks.

The evidence is consistent across sectors: structured training converts AI tool access into measurable productivity gains within weeks, not quarters. Time savings concentrate in administrative and documentation work, error rates fall sharply once staff learn to evaluate AI output, and the payback period for foundation-level training is measured in working days.

KEY FINDINGS

- Participants completing a structured AI training program report an average of 4.7 hours saved per week on administrative and documentation tasks
- Error rates in AI-assisted communications dropped by 63% after completion of prompt engineering training (compared to unstructured AI use)
- Average time-to-ROI for a 6-hour foundation-level AI training program: 11 working days based on documented time savings
- Self-reported confidence in using AI tools appropriately more than doubled between intake and 90-day follow-up
- Gains persist: participants re-surveyed at 6 months retained or improved on their 90-day productivity measures

1. BACKGROUND

Canadian SMEs have adopted AI tools faster than any previous workplace technology, but most adoption decisions were made without a way to measure return. Leaders could see licence costs precisely and benefits only anecdotally. The question this study answers is practical: when an SME invests in structured AI training, what changes, by how much, and how quickly does the investment pay for itself?

Prior CSBAA research documented the readiness gap — high adoption intent paired with low training provision. This report addresses the other half of the case: quantifying what closing that gap is worth, so that training budgets can be justified with the same rigour as any other capital decision.

2. METHODOLOGY

Longitudinal cohort study tracking pre- and post-training metrics for 84 Canadian SME participants across CSBAA Level 1 and Level 2 programs. Three metric families were measured at intake, at program completion, and at 90-day follow-up:

- **Productivity** — self-logged weekly hours on administrative and documentation tasks, validated against manager estimates for a subsample
- **Error rate** — proportion of AI-assisted outbound communications requiring correction after review, measured before and after prompt engineering training
- **Confidence** — self-reported confidence in appropriate AI use, on a standardized five-point scale

A six-month re-survey of available participants tested the durability of gains. ROI figures are computed from documented time savings valued at participant wage rates, set against the full delivered cost of training including participant time. Sector benchmarks are reported where cohort sizes permit.

3. WHAT CHANGED AFTER TRAINING

3.1 Time savings

Participants report an average of 4.7 hours saved per week on administrative and documentation tasks after completing structured training. The largest single contributors are first-draft generation for routine correspondence, document summarization, and meeting follow-up. Savings scale with baseline administrative load: roles spending more than half their week on documentation report the highest absolute gains.

3.2 Error rates

Error rates in AI-assisted communications dropped by 63% after completion of prompt engineering training, compared to unstructured AI use. The mechanism is twofold: better-specified prompts produce fewer defective drafts, and trained staff catch a higher share of remaining defects before material leaves the organization. Untrained AI use, by contrast, showed error rates above manual baselines in several cohorts — tool access without training can subtract value.

3.3 Confidence and durability

Self-reported confidence in appropriate AI use more than doubled between intake and 90-day follow-up, with the steepest gains among participants who began most skeptical. Six-month re-surveys show gains holding or improving — consistent with trained habits compounding as tools improve, rather than decaying after the program ends.

4. THE ROI FRAMEWORK

The framework values documented weekly time savings at participant wage rates and sets them against the full delivered cost of training, including participant time away from work. Applied to the study cohort, a 6-hour foundation-level program reaches break-even in an average of 11 working days. The same calculation, applied step by step:

Step	Input	Cohort average
1	Training cost per participant	Program fee + 6 hours of participant time at wage rate
2	Documented weekly time savings	4.7 hours/week on administrative and documentation tasks
3	Value of savings	Weekly hours saved × loaded wage rate
4	Break-even point	Cost ÷ daily value of savings = 11 working days

The framework deliberately excludes harder-to-price benefits — error reduction, confidence, retention — so the 11-day figure is a conservative floor. Organizations can substitute their own wage rates and program costs to produce a defensible, sector-comparable estimate before committing budget.

5. RECOMMENDATIONS

- **Treat training as an investment, not an expense.** With an 11-day average payback, foundation-level training clears any reasonable hurdle rate — budget it accordingly.
- **Start with the highest-administrative-load roles.** Time savings scale with baseline documentation burden; sequencing rollout by administrative load maximizes early returns.
- **Do not rely on unstructured tool access.** Untrained AI use showed error rates above manual baselines in several cohorts — access without training can cost more than it saves.
- **Measure before you train.** A two-week intake log of administrative hours is enough to compute a credible organization-specific ROI afterward.
- **Re-measure at 90 days.** The 90-day follow-up is where durable gains separate from novelty effects; make it a standard checkpoint.

6. CONCLUSION

Structured AI training is one of the few workplace investments where the return is fast, measurable, and durable. Across 84 Canadian SMEs, a six-hour program paid for itself in eleven working days on time savings alone — before counting a 63% reduction in communication errors or the doubling of staff confidence. The framework in this report gives any organization the tools to verify that result against its own numbers. The cost of training is now easy to justify; the cost of leaving staff untrained is what deserves scrutiny.

