

11th
Evaluation
Conference
in Prague

Data in Action:

Evaluation as the Key
to Effective Cohesion Policy
2028+

Driving Innovation and
Entrepreneurship:
Evidence from Firm-Level Interventions
in the Czech Republic

Mariana Pereira-Lopez

World Bank Group

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EVALUATION
UNIT NCA

- The EU Cohesion Policy invests heavily in jobs, skills, innovation, and the green and digital transitions —aiming to boost competitiveness and inclusion in Europe's lagging regions.
- DG REGIO and the World Bank launched an initiative to strengthen the monitoring and evaluation of innovation programs in the EU.
- We implemented two Randomized Control Trials (RCTs) in three regions of the Czech Republic: Ústí, Karlovy Vary, and the Moravian Silesian region.

The Role of AI in Stimulating Business Learning and Linkages

Ústí and Karlovy Vary

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- Fieldwork conducted by our team in October 2022 and a pilot in 2023 identified three key constraints limiting SME innovation and growth:
 - **Lack of awareness and engagement** with new technologies;
 - **Insufficient knowledge** to adopt advanced tools; and
 - **Low trust culture**, leading to weak collaboration and limited innovation.

Can AI Address Persistent Barriers to Innovation and Growth?

Can Peer Learning Accelerate AI Adoption in SMEs?

► [Go to Literature](#)

This evaluation

- *AI Klub*, a series of AI-focused workshops for SMEs.
- RCT with 168 firms to measure short-term impacts on technology adoption, innovation, networks, and firm performance.
- Finds significant improvements in:
 - **AI Usage:** +26% in overall AI use; strongest effects in customer management (+118%) and product development (+48%).
 - **AI Effectiveness:** +47% in expected productivity gains, especially in marketing and customer management (both +71%).
 - **Business Innovation:** +55% in innovation-related changes; +67% at worker level and +55% internally.
 - **Business Networks:** +35% in inter-firm discussions; +78% in new business connections.
 - **Firm Growth:** Growth in monthly sales and profits, with a 0.78 SD gain in the Growth Index.
- **Cost effective:** Almost full-cost recovery within one-month.

The AI-Klub program

The AI Klub program, implemented in partnership with innovation centers (ICUK, KARP), was designed to build AI capabilities targeted to specific business functions among SMEs:

Four key strategic objectives

- Expert-to-Peer Knowledge Exchange
- Peer-to-Peer Learning
- Practical Application
- Business Linkages

5 sessions

1. AI for Business Efficiency
2. AI for Marketing
3. AI for Sales
4. AI for Product and Service Development
5. AI for Financial Management

Each workshop featured an expert talk, hands-on exercises, and open discussion. Participants received ChatGPT, Canva Pro, and other AI tool licenses for the entire program.

- **Target Population:**

- SMEs per EU definition: <250 employees, turnover <€50M, balance sheet <€43M
- Firms located in Ústecký or Karlovarský regions
- All sectors.

- **Outreach Channels:**

- Email campaigns, newsletters, partner websites (ICUK, KARP)
- EU Innovation Voucher Scheme applicants invited via baseline survey

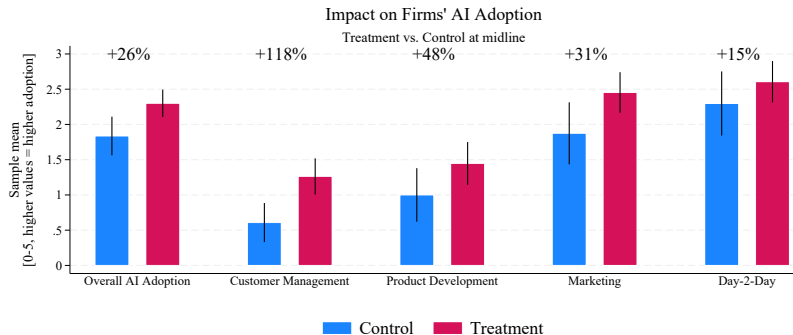
- **Randomization:**

- A total of 168
- Two groups: Treatment= 112 (2/3) & Control=56 (1/3)
- Stratified randomization by firm size & region (using STATA)

- **Take-up:**

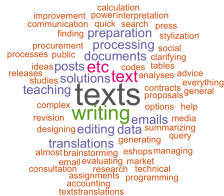
- 79% of the firms attended at least one workshop and 61% attended three or more

Treatment induced AI adoption across business functions



Main activities in which firms use AI for productivity purposes

Primary activity (Control)



Primary activity (Treatment)



LLM-based text analysis: AI Use for Product Development

Treatment Group

- **Strategic business development:** "development," "product," "research," "suitable," "analysis"
- **Market orientation:** "market," "ideas," "new," "trends," "predicting"
- **Systematic approach:** "brainstorming," "planning," "steps," "analyzing," "study"
- **Technical depth:** "automation," "production," "software," "coding"
- **Workshop 4 impact:** Market research with Perplexity/ChatGPT, product ideation, LEGO simulation

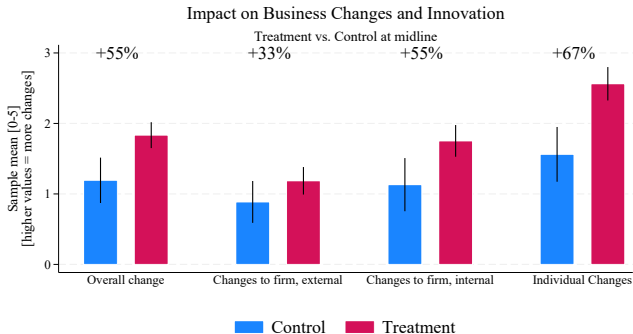
Control Group

- **Basic task execution:** "simple," "help," "creating," "editing"
- **Process-oriented:** "instructions," "recording," "action"
- **Lack of strategic depth:** Missing market research, competitive analysis, systematic planning
- **Ad-hoc usage:** No structured product development methodology

Key Differences:

1. Treatment views AI as a **strategic business development platform**; control uses it as a **productivity helper for routine tasks**
2. Treatment seeks **new value** (products, campaigns, relationships); control **manages existing work** (editing, generating, workload)
3. Treatment shows **strategic product innovation** mindset; control shows **operational task completion** mindset

AI adoption fostered individual & firm internal changes



Key Takeaways and Next Steps

- **AI Klub accelerated SME AI adoption through a highly accessible, guided approach.** Tailored workshops helped firms gain both **explicit** and **tacit** knowledge in applying AI to specific business functions.
- **Raised product and process innovation** & AI usage patterns suggest LLMs may induce entrepreneurial discovery process for new economic activities
- **Cost-effective, scalable solution** for fostering innovation and firm performance in transition regions.

Next steps:

- Finalize comparison with admin data and additional text analysis.
- Design of Phase 2 to further strengthen AI adoption building on Phase 1 (conditional on funding).
- Follow-up data collection will assess whether these positive effects persist over time.

Building Sales Capability in SMEs: A Study of a Scalable Training Program to Drive Sales Growth

Moravian Silesian Region

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² World Bank

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⁴ Insead

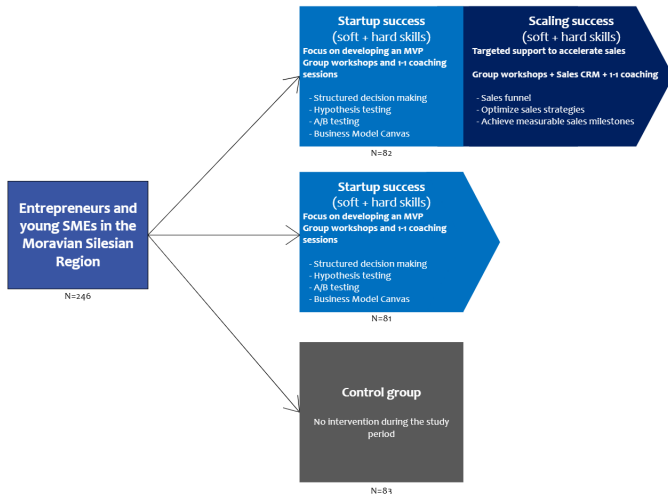
This study

- This study evaluates the impact of a two-phase program through an RCT involving 246 early stage entrepreneurs and SMEs in the Moravian Silesian Region.
 - **Phase 1: Startup success** (hard + soft skills): Helps entrepreneurs develop an MVP, with a focus on structured and scientific decision making.
 - **Phase 2: Scaling success** (hard + soft skills): Leverages a digital platform (CRM), training, and 1-1 coaching to optimize sales processes.
- This study is among the first to test raising growth ambitions + combining mindset with hard skills to influence entry and access to markets.

Preliminary results-Phase 1:

- **Increase in Go-to-Market strategies:** focusing on targeting customers and sales channels.
- **Sales Growth:** 50% increase in monthly sales (ITT), and more than double for those attending the workshops (ATT).
- **Profitability:** Non-statistical significant increases in profits.

Intervention Design



Take-up rates Startup Success: 81% of the businesses in the treatment group attended at least one session and 60% completed the program

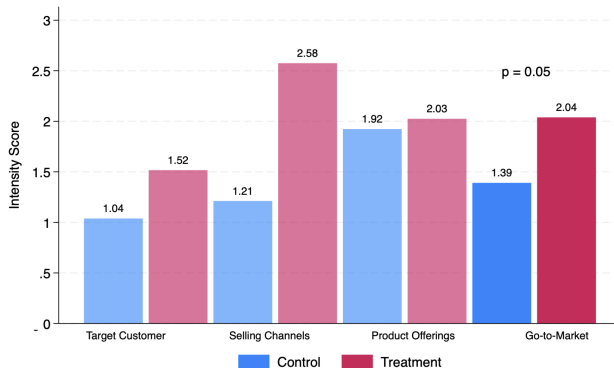
Learning Outcomes & Behavioral Changes (2)

Learning about business: LLM-based Text Analysis

Theme	Control Group	Treatment Group
Maturity of Thinking	Early-stage, emotionally driven	Structured, strategic, reflective
Tools & Frameworks	AI, basic process optimization	BMC, MVP, customer journey mapping
Mindset Shift	Realization of need for change	Clear commitment to data-driven planning and feedback
Marketing	Focused on self-promotion	Focused on strategy, branding, and positioning
Operations	Practical issues like invoicing, trust	Systemic issues like segmentation, structure, and planning
Learning Style	Learning by doing or through mentorship	Applying theory to practice, defining models
Business Phase	Just starting or treating as side project	More advanced planning, launching or running
Customer Focus	Still developing product/customer fit	Clear focus on testing customer needs and refining offers

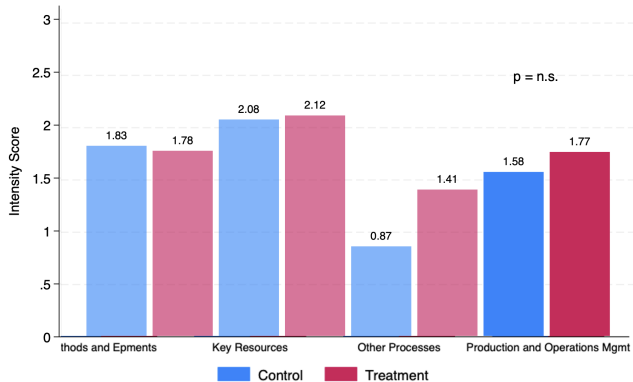
Go-to-Market (GTM) Activities: Model Free Evidence

Intensity of Changes in Go-to-Market (GTM) Activities



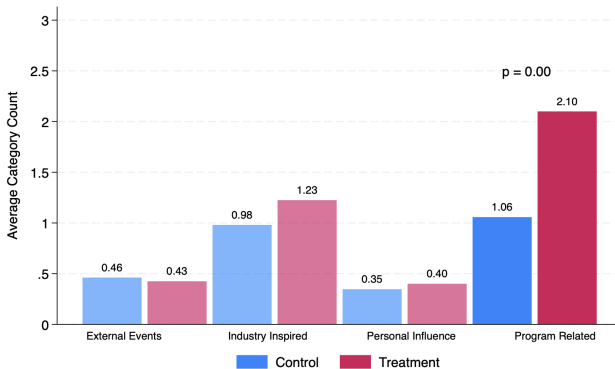
Production-Ops-Management (POM) Activities: Model Free Evidence

Intensity of Changes in Production-Ops-Management (POM) Activities



Drivers of Change

Average number of changes for Drivers of Change categories



Summary of Findings

Drawing across all domains, the Smart Start program shows a coherent pattern at midline:

- **Behavioral Catalysts:** Participants adopted an entrepreneurial, experimental mindset, with many attributing their Go-to-Market changes to the training and mentorship received.
- **Market-Facing Impact:** Strengthened Go-to-Market strategies led to notable revenue growth within a few months of program exposure.
- **Lagged Operational Effects:** Internal changes and profitability gains were not yet significant, likely due to the longer time needed for operational restructuring.
- These results highlight the program's effectiveness in driving early, external-facing business changes—while laying the groundwork for future internal improvements.
- **Cost effective:** Approximately €350 per participant. Estimated ROI of 129% over the first month.

Cross-cutting Insights:

- Targeted capacity-building delivers measurable short-term gains in adoption, sales, and innovation.
- Learning & networks amplify effects through peer exchange and guided practice.
- Programs are cost-effective and scalable, with strong potential in transition regions.
- Next step: assess persistence of impacts and refine Phase 2 designs.

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