

Boost AI Newsletter

MONTHLY BACKGROUND
SERIES



Boost AI – Monthly Background Newsletter

May 2026 Edition

AI for SMEs: Why It Matters Now

Welcome to the First Edition

You're reading the first issue of the Boost AI Monthly Background Newsletter Series — a practical, business-focused publication created as part of the Interreg North-West Europe (NWE) project. Our goal is simple: help small and medium-sized enterprises (SMEs) make sense of AI and identify where it can create real, measurable value in day-to-day operations.

Each month, we'll unpack a specific topic through clear explanations of core AI concepts, key developments and trends, and concrete business applications and opportunities for SMEs. We'll keep the focus on what works in practice — not technical hype — so you can make informed decisions, ask better questions, and take confident next steps.

Why AI Is Becoming Relevant for SMEs — Right Now

AI used to feel like something reserved for large tech companies with big budgets, specialist teams, and years to experiment. That's changed quickly. Today, many AI capabilities are available as affordable, ready-to-use tools — built into software you may already use, or offered as simple services that don't require building everything from scratch.

At the same time, the pressures SMEs face are intensifying: tougher competition, shortages of skilled workers, rising operating costs, and a growing volume of digital data across sales, operations, and customer service. AI can help by automating repetitive work, improving decision-making with better insights, and supporting employees so they can focus on higher-value tasks — without needing to “become a tech company” to get started.

What Do We Actually Mean by 'AI'?

Artificial Intelligence (AI) refers to a set of technologies that enable machines to perform tasks that would normally require human intelligence — such as recognizing patterns, understanding language, making predictions, or recommending actions.

In simple terms, AI systems learn from data and then use what they've learned to support or automate tasks. It's also worth noting that “AI” is an umbrella term: it includes several different methods and tools, and not every AI solution works the same way or is suitable for every business problem.

Basic AI Terms Everyone Should Know

- Machine Learning - A subfield of AI where systems learn patterns from data to make predictions or decisions without being explicitly programmed for every rule.
 - Deep Learning - A specialized type of machine learning that uses neural networks, often for image, speech, language, and complex pattern recognition.
 - Natural Language Processing (NLP) - Techniques that enable computers to understand, interpret, and work with human language (written or spoken).
 - Generative AI - AI systems that create new content such as text, images, audio, code, or videos based on patterns learned from existing data.
 - Large Language Models (LLMs) - Models trained on very large amounts of text data to understand and generate human-like language, often used in chat-based tools and writing assistants.
-

What AI Is — And What It Is Not

AI is a powerful support technology that can help you improve business tasks — from handling routine requests faster to spotting patterns in data that are hard to see manually. Used well, it can increase efficiency, improve consistency, and help teams make better decisions.

AI is not magic, and it's rarely "fully autonomous" in real business settings. It doesn't automatically understand your company context, your customers, or your processes — and it won't deliver results without clear goals, good inputs, and responsible oversight.

Most importantly, AI works best when it supports people rather than replaces them. With realistic expectations and the right use cases, it can take work off employees' plates, reduce errors, and free up time for customer relationships, problem-solving, and innovation.

Where SMEs Already Use AI Today

You don't need a large transformation program to benefit from AI — many SMEs are already using it in focused, practical ways such as:

- Customer communication and chatbots
- Document processing and invoice analysis
- Marketing and content generation
- Forecasting and planning
- Quality control and anomaly detection

In many cases, adoption starts with small improvements — one workflow, one team, one measurable outcome — and builds from there as confidence and capability grow.

AI as a 'New Team Member'

One helpful way to think about AI is as a digital team member: it can draft, summarize, classify, search, and suggest — quickly and consistently — as long as you give it clear instructions and the right information to work with.

Successful adoption still depends on the basics: realistic expectations, involvement from the employees who know the work best, and practical use cases tied to business goals. When AI is introduced as a tool people can shape and trust, it's far more likely to be used — and to deliver value.

Looking Ahead: Agentic AI

You may start hearing the term "Agentic AI" more often — especially in discussions about the next wave of AI tools for business. It's a shift from AI that responds to prompts toward AI that can take initiative within defined boundaries.

In simple terms, agentic systems can plan and execute multi-step tasks more autonomously to achieve a goal — for example, gathering information, deciding on next actions, and completing a workflow across tools. This is still an emerging field — and we will explore it in more detail in future editions.

A Practical Starting Point for SMEs

Companies do not need to become AI experts immediately.

A good starting point is often:

1. Identify repetitive or time-consuming tasks.
2. Explore whether existing software already includes AI features.
3. Start with small pilot projects.
4. Involve employees early.
5. Focus on business value — not hype.

Small successful use cases are usually more valuable than large experimental projects.

Looking Forward

Future editions of this newsletter series will cover topics such as practical SME AI use cases, useful AI tools, AI readiness, Generative AI in daily business, cybersecurity and AI, data quality, and emerging AI trends.

Our goal is simple:

Helping SMEs understand AI realistically, practically, and with confidence.

Content provided by the Machine Learning Group at RPTU for the Boost AI Monthly Background Newsletter series, May 2026 edition.

Steffen Reithermann <steffen.reithermann@cs.rptu.de> - ml.cs.rptu.de

