Ten Lessons from Implementing LLMs



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Foreword

When ChatGPT was launched we were nearly 2 years into automating Booking.com's customer service with old-school NLP solutions. Within 2 weeks we had hacked together a version with ChatGPT that already outperformed our 2 years of work. That was depressing and inspiring at the same time - and the first of many projects in which we have integrated LLM capabilities into business functions.

Along the way, one thing became clear: success with LLMs is not only about the input data. Technology is only half the story. The other half is clarity of purpose, the quality of your data, the trust of your people, and the discipline to iterate.

This document - 10 Lessons from Implementing LLMs - captures the most important insights we've learned from real-world projects. Each lesson reflects not theory, but practice: what works, what doesn't, and how to avoid the costly pitfalls that derail so many Al initiatives.

My personal take is this: the companies that win with Al don't chase grand all-encompassing solutions. They focus on solving concrete business problems, start small and scale smart, and build trust every step of the way. If you follow these lessons, you'll be well on your way to turning LLMs from buzzwords into bottom-line results.



I hope you find this guide valuable - and more importantly, actionable - as you chart your own path into the Al-powered future.



Andreas Kater Founder, Wakeflow

Introduction Unlocking the Power of LLMs in Business

gone before you.

A Practical Guide to Lessons Learned from the Al Revolution

The rise of large language models (LLMs) like GPT-4, Claude, and others has ushered in a new era of possibility. Businesses across industries - from finance to healthcare to retail - are experimenting with these powerful tools to streamline operations, enhance decision-making, and unlock new growth opportunities.

But here's the truth: implementing LLMs isn't as simple as flipping a switch. While some companies see remarkable results, others stumble - struggling with data quality, user adoption, or unrealistic expectations. The difference between success and frustration often comes down to one thing: learning from the experiences of those who've

This guide distills **10 essential lessons** that we have discovered on journeys with our clients in implementing LLMs. Each lesson is practical, actionable, and grounded in real-world business outcomes - not hype.

Here's what you'll discover:

- Why starting small beats a big-bang rollout.
- How to avoid costly mistakes around data quality and governance.
- The hidden role of trust, culture, and change management in Al adoption.
- Why hybrid approaches Al plus existing systems - deliver the best results.
- How to track ROI even when the payoff isn't immediately obvious.

Whether you're an executive exploring AI strategy, a product leader tasked with innovation, or a founder looking to future-proof your business, these lessons will help you navigate the AI revolution with clarity and confidence.

By the end, you'll understand not only the potential of LLMs but also the practical playbook for making them work in your business.

Lesson 1

Start With Clear Use Cases, Not Just Technology

One of the most common mistakes businesses make with LLMs is diving in because "AI is hot." Without clear goals, projects stall, waste money, and create skepticism. The companies that succeed flip the script: they start with specific problems and then apply AI to solve them.

Why Use Cases Matter:

- Focus = ROI: Measurable outcomes like time saved or costs reduced.
- Faster adoption: Teams buy in when Al solves their pain points.
- Lower risk: Narrow pilots allow you to test and learn safely.

Examples:

- Customer Support: Automate FAQs to reduce ticket volume.
- Legal: Summarize contracts in minutes, not hours.
- **Development**: Speed up coding with Al-assisted tools.
- Sales & Marketing: Generate personalized outreach at scale.

Takeaways:

Before starting an Al project, ask:

- 1. Where are we losing time or money?
- Which tasks are repetitive or data-heavy?
- 3. How could Al support (not replace) our people?

← Al is a means to an end. Start with the business problem, then bring in the right tool.

Lesson 2

Small Pilots Beat Big Bang Rollouts

Many companies fail with LLMs because they try to overhaul entire workflows at once. The smarter approach is to start small: test targeted pilots in one department or process, learn quickly, and expand from there.

Why Pilots Work:

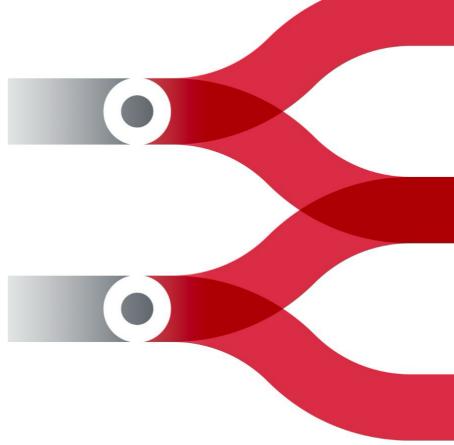
- Lower risk: Limited scope means mistakes don't ripple across the business.
- Faster learning: Early wins show what works (and what doesn't) before scaling.
- Stronger adoption: Teams see value in a safe, manageable environment.

Examples of Effective Pilots:

- HR: Automate screening of resumes or employee FAQs.
- Finance: Summarize quarterly reports or expense data.
- Customer Support: Draft replies for common queries.
- Marketing: Generate social copy variations for A/B testing.

Takeaway:

Think of LLM adoption as a series of experiments, not a one-time rollout. Start with one use case, measure impact, refine, and then expand.



Case Study Automating Customer Service at BOOKING.COM with ChatGPT

Booking.com manages one of the world's largest travel platforms, with a vast knowledge base of 800 articles averaging 200 words each. While this information covered nearly every aspect of their operations, the sheer volume made it nearly impossible for human agents - or even customers - to locate precise answers. At best, users could hope for a link to an article that might contain the information they needed.

The Challenge

- A massive knowledge base too big for humans to navigate.
- Answers were often just pointers to self-help articles not actionable solutions.
- Customer support spanned 8 languages, requiring professional translation to train 8 models.

The Wakeflow Solution

We deployed ChatGPT as a customer service assistant, customized to Booking.com's needs:

- **Superior recall**: The LLM could instantly retrieve the exact piece of knowledge relevant to the customer's question.
- **Concise answers**: Instead of long explanations, ChatGPT generated short, actionable responses tailored to the guery.
- **Multilingual support**: Though trained only in English, the system responded fluently in all 8 languages used by Booking.com and more.
- **Personalization**: By integrating customer database information, the assistant could provide location-specific answers. For example, a customer in Spain would see Spain-specific guidance rather than each country listed out.

The Results

- 2 weeks to deploy a solution that outperformed 2 years of legacy NLP development.
- Faster, more relevant responses across multiple languages.
- Dramatically reduced reliance on agents needing to search articles manually.
- Higher customer satisfaction thanks to precise, localized, and actionable replies.



This project was a turning point for the Wakeflow team. Seeing how quickly LLMs outperformed traditional NLP convinced us of their transformative power. Since then, we've been committed to helping businesses unlock similar results - fast, scalable, and multilingual Al solutions that actually deliver.

Lesson 3 Data Quality Beats Model Size

It's tempting to think the latest, largest LLM will solve every problem. In practice, **poor data sabotages** even the most advanced models. Businesses that succeed focus first on clean, structured, and relevant data before chasing bigger models.

Why Data Quality Matters:

- Accuracy: Garbage in, garbage out bad inputs lead to unreliable outputs.
- Trust: Users lose confidence if results are inconsistent or wrong.
- Scalability: Clean data makes it easier to expand Al into new areas.

Examples:

- **Customer Support**: Training on outdated FAQs leads to wrong answers.
- **Finance**: Poorly formatted spreadsheets cause missed insights.
- Legal: Incomplete contracts create hallucinated summaries.

Takeaway:

Before investing in larger models, invest in **data governance**: cleaning, tagging, and keeping information up to date. A smaller model trained on quality data will often outperform a massive one fed junk.



👉 Better data unlocks better Al, every time.

Lesson 4 Prompt Engineering Alone Isn't Enough

Early adopters often lean heavily on clever prompts to get results from LLMs. While useful, prompting by itself rarely delivers sustainable business value. Real impact comes from combining prompts with fine-tuning, retrieval-augmented generation (RAG), and system integration.

Why Prompts Fall Short

- **Fragile**: Small wording changes can produce wildly different answers.
- **Inconsistent**: Hard to guarantee reliable outputs at scale.
- Limited: Prompts can't access or reason over your company's private data.

Better Approaches

- **Fine-tuning**: Adapt models with your specific data for consistent tone and accuracy.
- RAG: Connect models to your knowledge base so answers stay up to date.
- Integration: Embed AI into workflows (CRM, ERP, support systems) for real utility.

Takeaway

Prompting is a starting point, not the finish line. To drive real business outcomes, combine LLMs with your data, tools, and processes.

The future isn't just better prompts it's smarter systems.

Case Study

Triangle Concrete Solutions faced a common challenge: their team was always on the road, too busy to answer incoming calls. Yet nearly every enquiry was the same - booking an initial inspection. Missing calls meant missed business.

The Challenge

- Frequent missed calls while crews were out in the field.
- Incoming enquiries were repetitive but critical to revenue.
- Needed a solution that could handle calls in English and Spanish.

The Wakeflow Solution

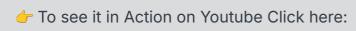
Voice Al Integration: Combined a Twilio phone number with OpenAl's realtime voice API to create a conversational phone agent.

Calendar integration: Synced directly with the company's schedule to book inspections in real time.

Function calling: Allowed the Al to check availability, reserve slots, and confirm bookings. Smart caller support: Answered FAQs and guided customers through the inspection process.

The Results

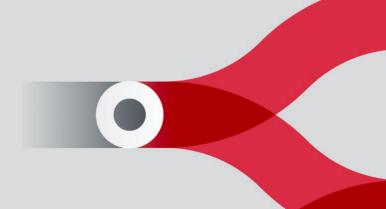
- No more missed enquiries: Every call is now answered by a reliable voice agent.
- Bilingual service: Seamlessly handled both English and Spanish callers.
- Time savings: Freed up staff to focus on field work while AI managed bookings.
- Higher conversion: More enquiries turned into confirmed appointments.







By pairing realtime voice AI with scheduling integrations, we turned a missed-call problem into a revenue-generating advantage. For Triangle Concrete Solutions, AI now acts as a 24/7 receptionist - reliable, bilingual, and always ready to book the next inspection.



Lesson 5 Guardrails Are Mandatory

LLMs are powerful, but they're not foolproof. Without safeguards, they can hallucinate, produce biased content, or expose sensitive information. Companies that succeed build **guardrails** into every stage of deployment to protect both the business and its users.

Why Guardrails Matter

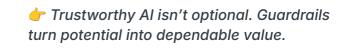
- Accuracy: Prevents unreliable or misleading outputs.
- **Compliance**: Ensures sensitive or regulated data isn't exposed.
- Trust: Users feel confident when they know results are safe and reliable.

Examples of Guardrails

- **Content filters** to block inappropriate or risky outputs.
- **Human-in-the-loop** checks for high-stakes decisions.
- Role-specific restrictions so different teams only access what they need.
- Audit logs to track Al decisions for compliance and learning.

Takeaway

LLMs should *assist*, not operate unchecked. Build safety nets from the start - filtering, oversight, and access controls - so your business can innovate without unnecessary risk.



Lesson 6 User Trust Is Fragile

Even the smartest AI won't succeed if people don't trust it. Employees and customers need to believe that outputs are accurate, safe, and genuinely helpful. Without trust, adoption stalls and AI projects lose momentum.

Why Trust Matters:

- Adoption: Users won't rely on tools they don't believe in.
- Reputation: One wrong answer can damage credibility.
- Engagement: Trust encourages experimentation and broader use.

How to Build Trust:

- Transparency: Show sources or explain how answers are generated.
- Confidence signals: Highlight uncertainty so users know when to double-check.
- Gradual rollout: Start with low-stakes tasks before scaling to critical ones.
- Feedback loops: Let users flag errors and improve the system.

Takeaways:

Al adoption is as much psychological as technical. Treat trust as a design feature - be **open**, **transparent**, and **responsive** to feedback.

→ Win trust early, and your Al tools will scale naturally.



Change Management Matters as Much as Tech

Many Al projects fail not because of technical issues, but because people resist change. Employees may fear being replaced, or leaders may struggle to align teams. Successful implementations treat change management as a core part of the rollout.

Why Change Management Matters:

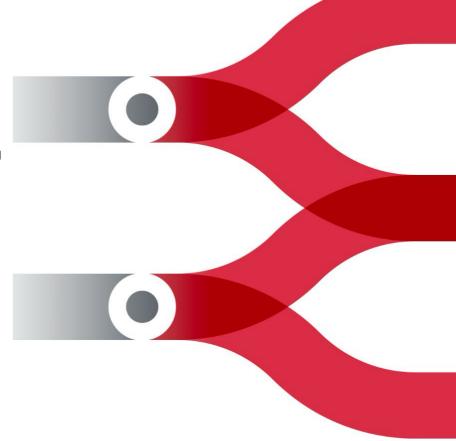
- Adoption: Tools only deliver value if people actually use them.
- Morale: Clear communication reduces fear and builds excitement.
- Alignment: Ensures everyone understands how Al supports business goals.

What Works:

- Training & onboarding: Give teams hands-on practice with Al tools.
- Clear communication: Explain why Al is being adopted and how it helps.
- Champions: Appoint internal advocates to promote adoption.
- Incentives: Reward employees for experimenting and finding wins with

Takeaway:

Al success is 50% technology, 50% people. Invest as much in culture, communication, and training as you do in models and infrastructure.



→ Al transformation is a people project first, and a tech project second.

Case Study Smarter Hotel Pricing with BRAINY

BrainyRMS helps hotels maximize occupancy and revenue through automated room pricing. To scale their solution, they needed a platform that not only integrated with the largest Property Management Systems (PMSs) but also delivered a seamless, intelligent customer experience.

The key: taking actions via Chat



The Challenge

- Hotels required real-time pricing insights but data was buried in complex systems.
- Users wanted faster, simpler ways to take action across multiple properties.
- Customer support needed to answer operational questions without manual digging.

The Wakeflow Solution

- PMS Integration: Built a robust platform that connected directly to leading PMSs for live, accurate data.
- **LLM-powered chatbot**: Enabled natural language queries like "What was the average price per room in May vs June 2025?" with instant answers from the database.
- **Function calling**: Let users take direct actions via chat, e.g., "Please lift prices in August in our Venice hotels by 10%."
- Streamlined workflows: Combined insights and actions into one intuitive interface.

The Results

- Faster decisions: Hotel managers could query data and act in seconds, not hours.
- Higher adoption: Natural language interface made complex pricing tools accessible to all staff.
- Increased efficiency: Automated adjustments across entire hotel portfolios through chat.
- Scalable platform: Built to handle integrations across multiple global PMSs.

Our Takeaway

This project proved how LLMs can go beyond support - becoming a command center for action.

By pairing conversational AI with database access and function calling, BrainyRMS gave hotel operators a powerful new way to optimize revenue at scale.





Lesson 8 Measuring ROI Early Is Tricky

Leaders often expect instant financial returns from LLM projects. In reality, early wins usually show up as time savings, productivity gains, and better employee experiences - the dollar impact comes later.

Why ROI Is Hard at First:

- Intangible benefits like faster workflows don't always show up on a balance sheet.
- Learning curve means efficiency gains take time to build.
- Indirect impact (e.g., happier employees, quicker decisions) is harder to quantify.

How to Track Value:

- Leading indicators: Hours saved, tickets resolved faster, documents processed more quickly.
- Employee feedback: Measure satisfaction and reduced burnout.
- Pilot benchmarks: Compare pre- and post-Al performance on small projects.
- Cost avoidance: Track areas where Al prevents extra hiring or delays.

Takeaway:

Don't abandon Al projects if ROI isn't immediate. Track early **signals of value** - time saved, errors reduced, happier teams - as stepping stones to long-term financial gains.



The money follows the momentum.
Focus on progress, not perfection, in the early stages.

Lesson 9 Hybrid Approaches Win

Pure LLM workflows sound exciting, but in practice they're often brittle. The most reliable solutions **blend Al with traditional systems** - databases, APIs, and rules engines - to balance intelligence with consistency.

Why Hybrid Works

- Reliability: Deterministic systems handle tasks that require precision.
- Flexibility: LLMs handle ambiguity and unstructured data.
- Scalability: Combining both ensures performance across more use cases.

Examples

- Customer Support: LLM drafts replies, but a rules engine enforces compliance.
- Finance: Al summarizes data, while the system of record provides exact figures.
- Operations: All suggests actions, but final steps follow predefined workflows.

Takeaway

Don't expect LLMs to do everything. Pair them with your existing systems to get the best of both worlds: creativity plus consistency.

Lesson 10 Continuous Iteration Is the Norm

LLMs evolve quickly, and so should your approach. Treating implementation as a one-off project is a recipe for obsolescence. The companies that win see Al as a living program - constantly tested, updated, and improved.

Why Iteration Matters

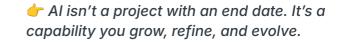
- Model updates: New versions improve accuracy and cut costs.
- User needs: Feedback reveals new opportunities and gaps.
- Business shifts: All must adapt as goals, markets, and regulations change.

How to Iterate

- Regular testing: Re-run benchmarks as models and data evolve.
- **Feedback loops**: Capture user input to refine prompts and workflows.
- **Update cycles**: Schedule reviews for prompts, integrations, and guardrails.
- Scalable pilots: Expand successful tests into broader rollouts.

Takeaway

Think of LLM adoption as ongoing R&D. The goal isn't perfection at launch. It's continuous improvement that compounds over time.



Implement LLMs Successfully Here's How

Implementing large language models is full of potential - but also full of pitfalls. From unclear use cases to weak data quality, from rushed rollouts to low adoption, many companies stumble before they ever see real ROI.

At Wakeflow, we help you cut through the noise and implement LLM solutions the right way: grounded in strategy, guided by experience, and built for measurable results.

The Al revolution is already reshaping business. The question isn't *if* - it's *how*. With Wakeflow, you can move faster, avoid costly mistakes, and implement LLM solutions that deliver lasting value.

Our Approach

- Clarity First: We start by identifying your highest-impact use cases, not by chasing technology trends.
- Pilot to Scale: We design small, focused pilots that prove value quickly, then expand once results are clear.
- Data Readiness: We help clean, structure, and prepare your data so your Al delivers accurate, trustworthy outputs.
- Safe & Reliable: We build guardrails and integrate Al with your existing systems to ensure compliance and consistency.
- Change Management: We support your teams with training, adoption strategies, and ongoing iteration.

👉 Let's build together

Interested? Let's Talk



Or reach out to us: +447500172268 contact@wakeflow.io

Wakeflow Your LLM Partner

At Wakeflow, we understand how painful it can be to find yourself stuck in a process that should be automated.

We've spent years helping businesses like yours take the headache out of technology.

Our approach is simple:

Book a call

your problem.

Tell us about your broken process, and we'll design a software-supported fix.

Let us fix it We'll prototype, develop and deploy a bespoke automation that solves

Forget about it.

Sit back, safe in the knowledge that your

process is running on autopilot.

Our clients don't just save time—they transform their businesses. They go from feeling exasperated and trapped in repetitive manual tasks to being 'free'—free from wasting time and free to grow their businesses.

Imagine a world where:

- Your processes are running on autopilot
- Your team is free to focus on high-value tasks
- You're making decisions based on real-time data
- Your business is scaling effortlessly

This isn't a pipe dream. It's what we deliver every day.

Ready to stop working IN your business and start working ON it?

Don't let manual processes hold you back any longer. It's time to embrace the power of automation and unlock your business's true potential.

Take the first step towards a more efficient, profitable, and future-proof business. Contact Wakeflow today, and let's start your automation journey together.

W

Book a Call

It's 2024—Most businesses still waste time on things that should be automated. Wakeflow builds foolproof software that puts time-wasting processes on autopilot. We help you win back your time and solve your process problems for good.





