The Coming AI Stall—and the Path Forward with

Craxel's Black Forest™



Executive Summary

Enterprise AI is about to hit a wall. Large language models (LLMs) are transforming how people interact with technology, setting new expectations for speed, connectedness, and ease of use. Yet most enterprise data infrastructures were never designed to deliver the real-time, high-resolution context that AI now demands. Without a new foundation, enterprise AI initiatives will stall, delivering costly experiments instead of lasting transformation. Craxel's Black Forest™ is an AI-native platform that provides that foundation: a data-centric, real-time, and cost-effective platform that delivers the precise context AI systems need, instantly, and at scale.

Why Speed and Context Will Define Al Success

The rise of LLMs marks a paradigm shift in human-computer interaction. Natural language as an interface—whether text or speech—is here to stay. This interface isn't just more intuitive; it's faster, more exploratory, and fundamentally more aligned with how people think. Just as faster processors once revolutionized productivity, faster access to business information through LLMs will define the next leap in enterprise value creation.

But there's a core disconnect: while LLMs are advancing rapidly, enterprise data infrastructure remains outdated and unable to deliver insights or context in real time and at scale. This is the Achilles' heel of enterprise Al and why Al-native infrastructure, purpose built for this new era, is essential.

The New Expectation Curve

- LLMs have reset user expectations. Once users experience instantaneous, intelligent interaction with a tool like ChatGPT, tolerance for latency, slowness, or friction drops to near zero.
- Speed is not just a user experience (UX) factor, it's a productivity multiplier. Faster feedback loops enable faster iteration, better decisions, and competitive advantage.
- Exploration fuels insight. The benefit isn't only that you can ask questions in plain language, it's that you can explore possibilities and pursue follow-up lines of inquiry dynamically.

The Infrastructure Gap

- Enterprise data systems were not designed for this. Business Intelligence (BI) platforms struggle to answer questions from static dashboards—let alone support a dynamic, token-by-token AI conversation.
- Even elite organizations, such as the U.S. government, cannot "brute force" this challenge with current technology stacks.

LLMs cannot hold an entire enterprise's data in memory. Training on all enterprise data is
infeasible due to cost and the constant need for updates. Instead, LLMs must be fed
context on demand.

The Coming AI Stall

- Without real-time, high-resolution data context, enterprise AI will fall short of user expectations.
- The result will be costly experiments, short-lived projects, and disconnected pipelines that deliver flashy demos, but not sustainable transformation.
- Productivity gains will plateau until a new data foundation is in place.

Enter Black Forest

The future of enterprise AI will not be built on today's data infrastructure. It requires a new kind of platform: data-centric, real time, cost effective, and designed for context-on-demand delivery to AI systems.

Black Forest is that platform. It's not just a data lake or warehouse; it's a purpose-built context engine for the AI-native enterprise. It delivers to LLMs exactly what they need: relevant, current, fine-grained data, instantly.

Why Black Forest Matters

Challenges	Current State	Black Forest
Data Latency	Hours to Days	Sub-second
Cost	Prohibitive for Real Time	Massively Optimized
Context Scope	Narrow, Fragmented	Unified and Queryable
Interface	Stovepipes, Dashboards	Language + Context
Update Cycle	Manual Extract, Transform, Load (ETL), Stale Reports	Live, Continuously Synced

What Comes Next

Many organizations will invest in partial solutions. But just as cloud-native platforms replaced legacy IT stacks, AI-native data platforms will emerge as the true enablers of productivity. Those who invest early in Black Forest AI-native architecture will be the ones to fully realize the promise of AI in the enterprise. The leaders who act now will set the standard for how AI transforms decision-making at scale.



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About Craxel

Craxel is a software company empowering the world's largest organizations to extract the value they must have from their largest data assets. Craxel's patented Black Forest™ software products deliver solutions with astonishing speed, efficiency, and security for the world's largest data, analytics, and Al problems, achieving price/performance at scale that is unprecedented in the history of computing. Powered by unique O(1) technology for indexing multidimensional data in constant time, Black Forest delivers extraordinarily fast time to insight for high volume, high velocity use cases, enabling both rapid human and automated decision making. The fast query times provided by Black Forest dramatically improve human productivity, while enabling the next generation of algorithmic and AI capabilities. Black Forest achieves both speed and efficiency because it uses a fraction of the compute power required by traditional approaches.

Speed and efficiency equals Better Decisions, Faster, At Any Scale.

