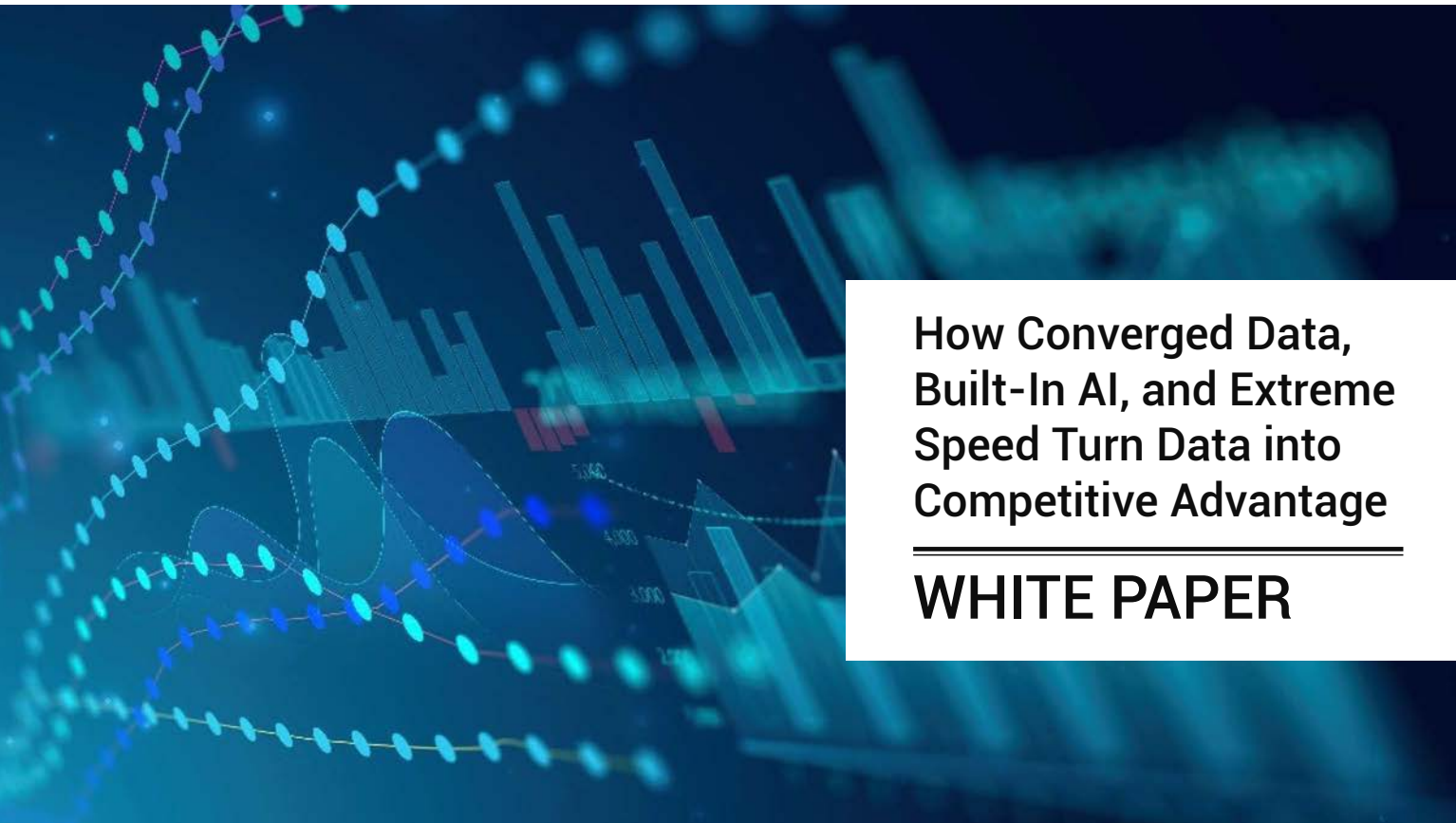


# 5 Reasons Oracle AI Database Drives Great Business Outcomes in the AI Economy



How Converged Data,  
Built-In AI, and Extreme  
Speed Turn Data into  
Competitive Advantage

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**WHITE PAPER**

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Larry Ellison has said, “**AI changes everything.**”

Businesses across every industry are committing to sweeping transformations that will enable them to not only compete but to innovate, grow, and thrive in this wild new AI-powered global economy. For example, those companies will need to re-imagine how they:

- Track signals from the market,
- Decide what new products and services to launch,
- Build those new offerings,
- Sell those new offerings,
- Engage long-term with customers,
- Recruit and nurture great talent,
- Allocate capital, and
- Determine who's a customer or a competitor or a partner.

Business leaders are rapidly coming to understand that to unleash the full power and potential of the AI Revolution requires an entirely new set of strategies and tools across the enterprise-tech spectrum. For example:

- **Trillion-dollar buildouts of AI data centers:** Oracle and the other hyperscalers are investing hundreds of billions of dollars in enormously large data centers to deliver levels of computing

power unimaginable just a few years ago to enable businesses to run AI models and applications at enterprise-scale;

- **Enterprise apps are morphing into autonomous AI agents:** The enterprise apps that run the global economy are rapidly evolving into highly intelligent and autonomous agents that will optimize decision-making and accelerate operations; and
- **Converged databases are becoming essential for the AI Revolution:** While single-function databases were able to gain followers over the past decade in the world of traditional business, success in the nascent AI Economy will require AI native, multi-model data-management for an AI-first and AI-everywhere world. Why? For the simple reason that the more business data that your AI has, the better it will actually perform.

## **Speed: The New Business Superpower**

Just as the new generation of extraordinary new AI factories plus the ever-expanding pool of LLMs are turning out insights and answers, images, videos, and ideas far more rapidly than ever before possible, so too are most business leaders realizing that the AI Revolution is requiring them to take in and analyze more data more rapidly than ever before, adapt and innovate to fast-changing market realities more rapidly than ever before, and make weighty decisions more rapidly than ever before.

## **Data: The New Business Superfood**

Just as you can't have a successful AI strategy and execution without a successful data strategy, here in the AI Revolution you can't unleash the full power and potential of data unless you have it swarmed with the right AI tools and context throughout every layer of your enterprise tech stack.

And that's where the magic of Oracle AI Database and Oracle's entire AI-optimized data-management portfolio comes into play.

For many years — decades — highly technical IT executives and their database analysts have turned to and trusted Oracle Database for its unmatched capabilities, performance, security, flexibility, and openness. But now, on top of that, Oracle has given non-tech business executives lots and lots of reasons to pick the new Oracle AI Database because of its unique ability to help deliver on that long list of essential AI-economy business transformations listed above.

So, if "AI changes everything," then the business world needs a new generation of enterprise technology for the AI Economy, particularly around the data that's fueling this revolution.

And to live up to that promise, the new Oracle AI Database offers customers a powerful combination:

- all of the superb Oracle data-management foundations the company has developed and delivered over the nearly 50 years as businesses and governments across the globe have entrusted Oracle databases with their most-valuable and most-sensitive data; plus
- a long list of AI-centric innovations and enhancements purpose-built to drive superb business outcomes in the emerging — and very different — AI Economy.

To flesh that out, here are five reasons why the new Oracle AI Database can help customers turn the many challenges surrounding the AI Economy into growth, acceleration, innovation, and more.

## 1. In the AI Economy, Priority #1 Is Business Outcomes

As data and databases have become increasingly strategic over the past decade, database vendors have split into two camps:

- a. Converged:** Oracle has chosen to help customers prioritize innovation over integration by constantly improving its Converged Database Architecture, which offers customers everything they need in a single, complete, and unified database engine.
- b. Point Solutions:** Other database vendors have created a slew of point solutions—graph databases, vector databases, document databases, transactional databases, analytical databases, etc.—that customers must acquire, install, manage, integrate, secure, monitor, and manually implement data pipelines to shuffle data back and forth.

**Oracle's database for the AI Economy:** Here in the AI Economy where the approaches of the past simply cannot hold, business leaders are demanding that IT teams jettison the expensive and unproductive game of trying to integrate technologies that were never intended to work together. That's why Oracle has built AI directly into every element of its fully converged Oracle AI Database, which allows it to address three business priorities that have until now often been at cross-purposes:

1. Artificial Intelligence
2. Mission-Critical Workloads
3. Application Development

Because single-purpose databases lack the ability for AI to be engineered into the database at every level, they have to resort to the clunky approach of “bolting on” AI as something of an afterthought, which means developers have to endlessly rewrite applications, and the integration burdens expand, and cybersecurity risks multiply as a result of all that rework and patchwork.

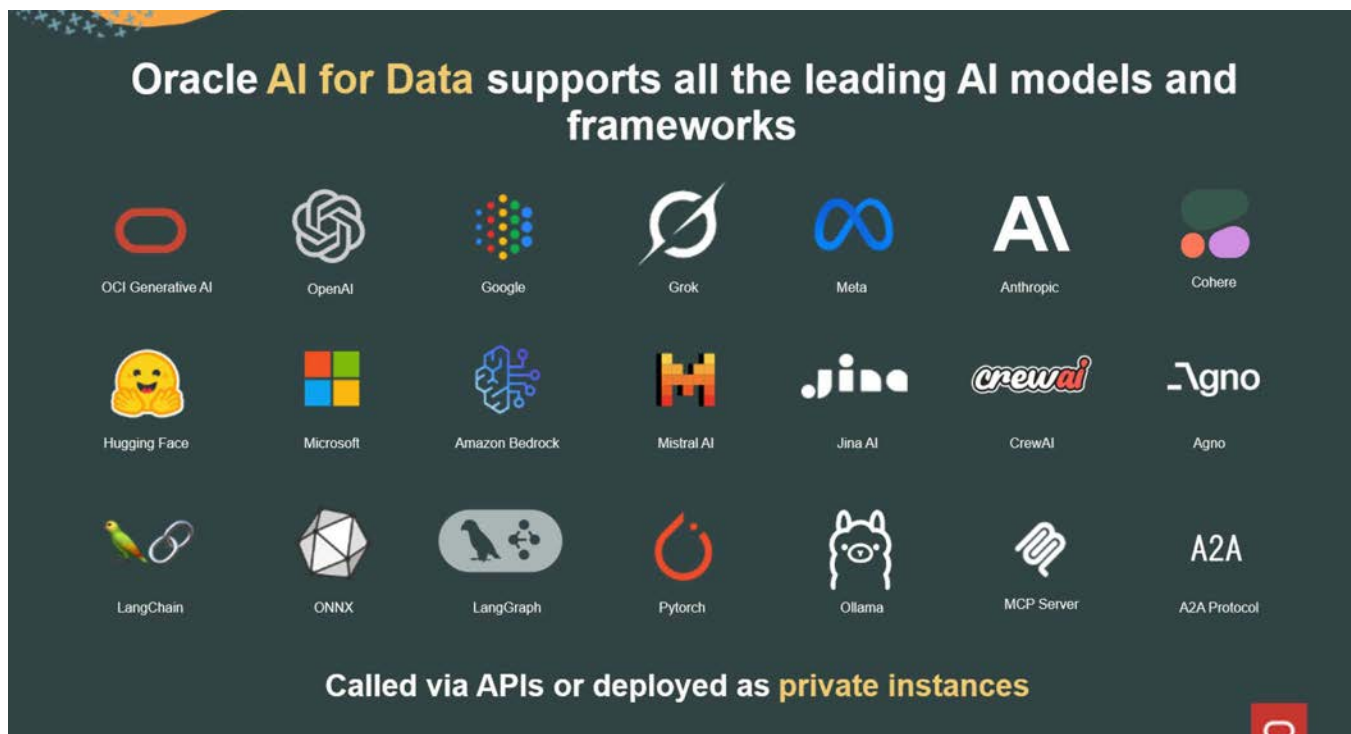
## 2. For Great Business Outcomes, AI Must Access *All* Your Data

With its cutting-edge vector technology, Oracle AI Database enables businesses to search and reason over private corporate data as well as the vast stores of public internet data on which LLMs were originally trained.

Called “multimodel,” this approach allows Oracle AI Database to work with not only relational data but all types of data: vector, spatial, JSON, text, and XML. As a result, customers can rapidly get up and running with production workloads AI/ML, IoT, analytical, streaming, OLTP, graph — without having to spend massive amounts of time and money bundling, sorting, and moving their data to fragmented AI engines.

In addition, while the “AI hallucination” phenomenon might be amusing in the consumer world, it can be devastating in the enterprise when dealing with contracts, financial results, employee evaluations, product designs, supply-chain planning, and more.

That’s exactly why Oracle’s “AI for Data” strategy gives customers access to all the leading models:



Source: Oracle

### 3. The Power of Speed

It is impossible to overstate the significance of speed as the AI Revolution gathers momentum and lays the foundation for the AI Economy: speed of operations, speed of insights, speed to innovation, and speed-to-market are all becoming competitive differentiators, with each one predicated on the ability to process and analyze vast amounts of data.

In a recent interview, Hasan Rizvi, Oracle executive vice-president of database engineering, described the new business reality this way:

**"What we're really seeing is a fundamental shift from human-scale operation to machine-scale and machine-speed operation, and everything is going to be much, much faster. So, we would ask our customers, 'Is your data foundation ready for that challenge? Your data needs to be intelligent; your AI needs to get to all your data wherever it might be, and you have to move really fast and you have to be secure.'"**

**"Because if you're not able to move at this speed, you literally will not be able to compete. This is really an existential issue."**

**"Oracle AI Database gives customers the data foundation to innovate faster, scale smarter, and can deploy AI anywhere."**

### 4. How .biofy Saved 2,000 Lives with Autonomous AI Database

A superb example of Rizvi's vision brought to life comes from Oracle customer .biofy and its remarkable story of how Oracle AI Vector Search and Autonomous AI Database allowed .biofy to "unlock new horizons" resulting in:

- saving 2,000 lives in a single year;
- slashing diagnosis time from 120 hours to 4 hours;
- boosting process performance by 50%; and
- cutting costs by 50% (please see more details in adjacent image).

The CEO of .biofy, Paulo Perez, credited Oracle AI and database technologies with helping save those 2,000 lives by "revolutionizing our disease identification process" by being able to create personalized therapies more rapidly than ever before **and** with far greater accuracy.

As impressive as those results are, what makes the outcome for .biofy and its patients even more striking is that .biofy was able to do that while slashing IT investments in the project by 50%.

**.biofy's Revolution in Data Science:  
Unlocking New Horizons with Oracle Vector Search**

**biofy**  
TECHNOLOGIES

*"Oracle's technology has been instrumental in revolutionizing our disease identification process. The AI Vector Search and Autonomous Database have enabled us to significantly reduce diagnosis time, improve accuracy, and provide better patient care."*

**Paulo Perez**  
CEO & coFounder, biofy Technologies

**Business Needs**

- Analyze large datasets to uncover patterns and trends in bacterial resistance
- Provide accurate and timely information to clinicians for effective treatment
- Process large datasets efficiently, supporting therapy development and unknown strain identification
- Use high computational power for quick genomic and clinical data processing

**Business Results**

- Achieved 99% accuracy in resistance profiling, saving 2,000 lives in one year with personalized therapies
- Cut diagnosis time from 5 days to 4 hours using Oracle ADB Vector Search and AI
- Oracle ADB scalability enables BioFy to serve more hospitals and laboratories
- Achieved 50% better performance at half the cost using Oracle technologies

Source: Oracle

## 5. More Business Innovation and Less Tech Integration

For the past 25 years, IT organizations have often been a source of mystery for non-tech executives who've had trouble understanding what IT does, how it sets priorities, and why it needs so much money every year. The emergence of the AI Economy is going to be an unstoppable forcing function that ends that dangerous disconnect once and for all because companies that cannot overcome that disconnect and integrate IT fully into the business will fall behind, become increasingly irrelevant, and then collapse.

Big companies that have been around for decades face an enormous challenge with the staggering volume of complexity arising from so many specialized databases and so many related moving parts and so little consistency — and the only way out is more integration, which means projects take much longer and cost much more to complete.

In contrast, the converged architecture behind Oracle AI Database—and all of the members of the Oracle Database family — allow businesses to avoid all that complexity and cost and delay. Oracle AI Database

is the perfect match for the rapid pace demands of the AI Economy:

- runs multiple workloads;
- handles every type of data;
- handles AI, analytics, and OLTP;
- supports generative and agentic AI
- brings AI to data, which saves money and enhances cybersecurity;
- enables AI to engage with **all** of a business's data; and
- is fully compatible with customers' existing Oracle databases.

## Conclusion

The nascent AI Economy offers tremendous opportunities for those businesses that can harness the power of **all** of their data, that can focus their people and budgets on customer-facing innovation rather than internal integration, and that can unleash the power of AI end-to-end across their organizations.

But none of that is possible without a superb data foundation — and the #1 lesson that CEOs and boards of directors are learning today is that you cannot have an AI strategy without a future-proof data strategy.

For customers, the choice is clear: that data foundation can be cobbled together across 5 or 10 or 15 different databases, resulting in endless integration, fragmented data stores, cybersecurity risks, and spiraling IT costs; or, it can be built on Oracle AI Database and complemented with Oracle Autonomous AI Lakehouse to let customers unlock the full power of AI across all their data and enables them to spend more on growth and innovation, and less on stifling integration.

But unlike with previous step-changes in enterprise technology, the repercussions for business customers of making the wrong choice are far more consequential than falling behind competitors in the market and blowing up their already-stressed IT budgets.

Because in the fast-paced AI Economy, second chances are no longer guaranteed.