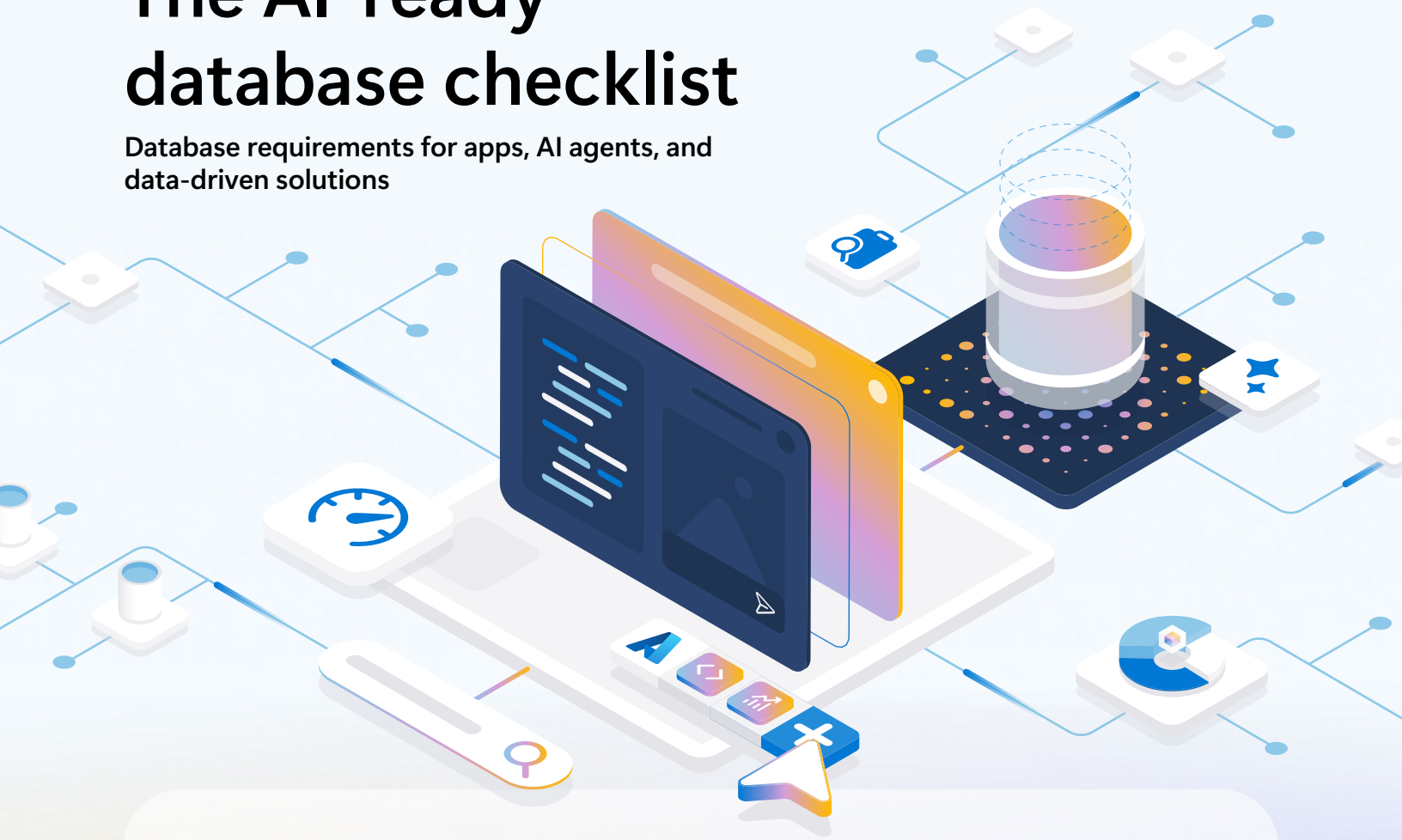
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# The AI-ready database checklist

**Database requirements for apps, AI agents, and data-driven solutions**



## Is your database AI-optimized?

**Look for these essential capabilities:**

- **Data at AI scale**
  Capacity and elasticity to handle changing needs
- **Data in real-time**
  Quickly ingest, process, and make data available to apps and models
- **Fast and efficient vector support**
  Powerful and cost-effective vector storage, semantic search, and approximate nearest neighbor
- **Powerful integrations**
  Seamless connections to AI models, tools, and analytics systems

# Build AI agents and apps faster with Azure Databases

**Azure Databases provide the scale, speed, and integrations to power it. Build with confidence, knowing your data is ready for AI.**

| Azure Cosmos DB | Azure Database for PostgreSQL | Azure HorizonDB | Azure SQL Database |
|---|---|---|---|
|  |  |  |  |

### Data at AI scale

- Support workloads **of any size**
- **Flexibly adapt** to changes and new requirements
- Elasticity to **support dynamic workloads**

### Fast and efficient vector support

- Ability to natively **store and query vectors**
- Advanced information discovery with **vector search, reranking, and semantic search**

### Data in real-time

- Provide AI models and analytics platforms with **immediate access to data**
- **Low-latency reads** and writes to apps and agents

### Powerful integrations

- Built-in **support for AI models and tools**
- Enable advanced analytics through **real-time access for OLAP systems**
- **Easily integrate** with Azure AI Foundry, Azure Databricks, and Microsoft Fabric

## AI use cases Azure Databases are built to power

Learn more

**Operational + Vector Database**
Keeping operational and vector data together in the same database to reduce complexity and cost

**Retrieval Augmented Generation (RAG)**
RAG (Retrieval Augmented Generation) Apps to personalize GenAI experiences

**Conversational History**
Optimize application responses, manage threads, and enable auditing

**Semantic Caching**
Reduce latency and cost of GenAI experiences

**AI agents**
Multi-agent and AI agent solutions

**Fine-tune SLMs**
Use SQL data to fine-tune low latency SLMs used in mobile apps

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