# From Source Code to Source of Truth: 30 Years of Open Source Database Evolution

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FOSS 2025 Chernihiv University - Oct'25

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# About

## Alkin Tezuysal

Director of Services @AltinityDB

Open Source Database Evangelist



### LinkedIn
linkedin.com/in/askdba/

### X
@ask_DBA

## Previously

ChistaDATA, PlanetScale, Percona and Pythian
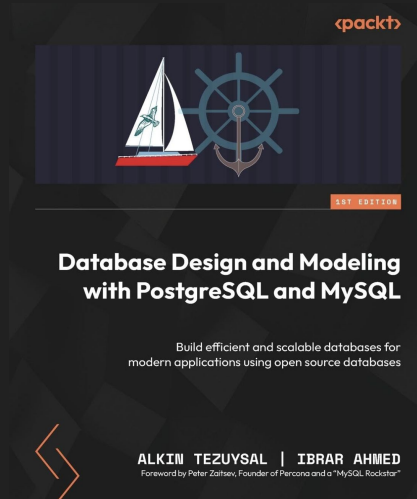as Senior Technical Manager, SRE, DBA

## Earlier in Life

Enterprise DBA , Informix, Oracle, DB2 , SQL Server

## Recent Recognitions:

Most Influential in Database Community 2022 - The Redgate 100
MySQL Cookbook, 4th Edition 2022 - O'Reilly Media, Inc.
MySQL Rockstar 2023 - Oracle (MySQL Community)
Database Design and Modeling with PostgreSQL and MySQL
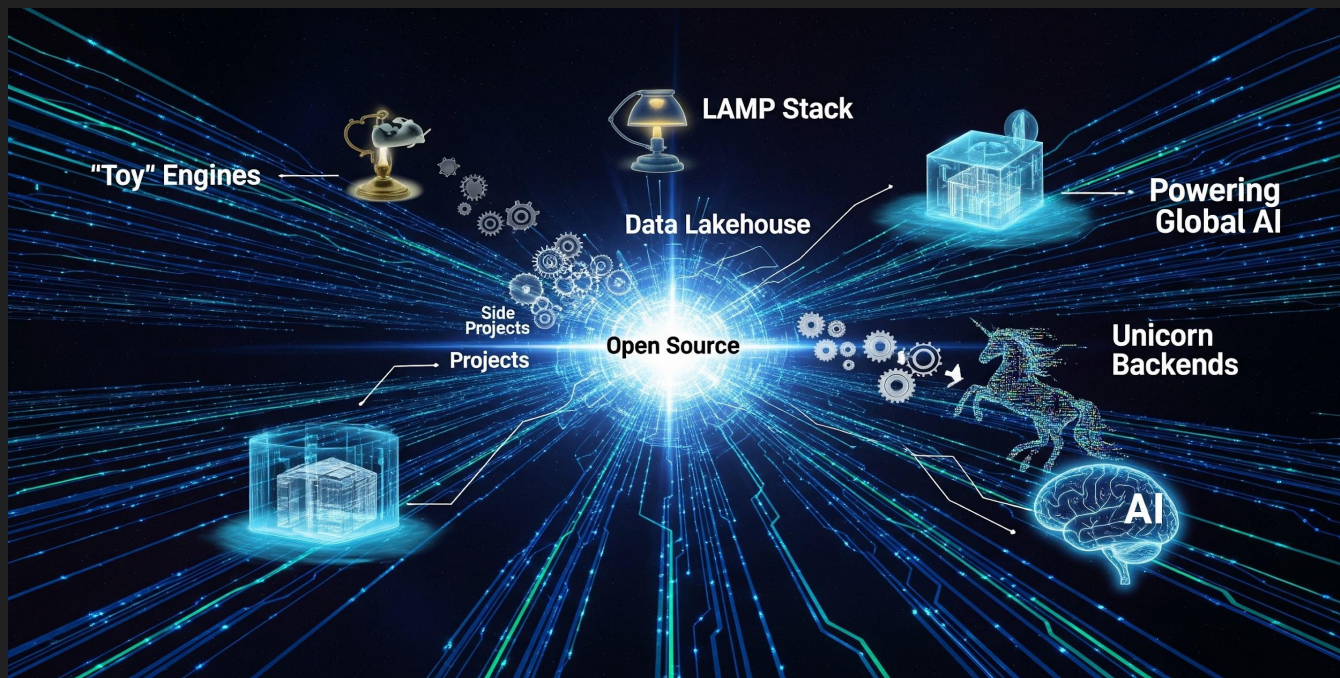2024 - <Packt>
Oracle ACE Pro 2025 - Oracle

Avid sailor who works and authors at
@svrubato

# The Journey So Far



1995–1996
MySS emerge
PostgreSQL

2009  2009-2010
aws
AWS RDS introduced

2016
ClickHouse introduced

2023+
Vector-native DBs & AI-native worklioads

# Open Source Reshaped Data

# 1990s: The Relational Foundation



MySQL™

PostgreSQL

Lightweight

GPL licensed

Fast for the web

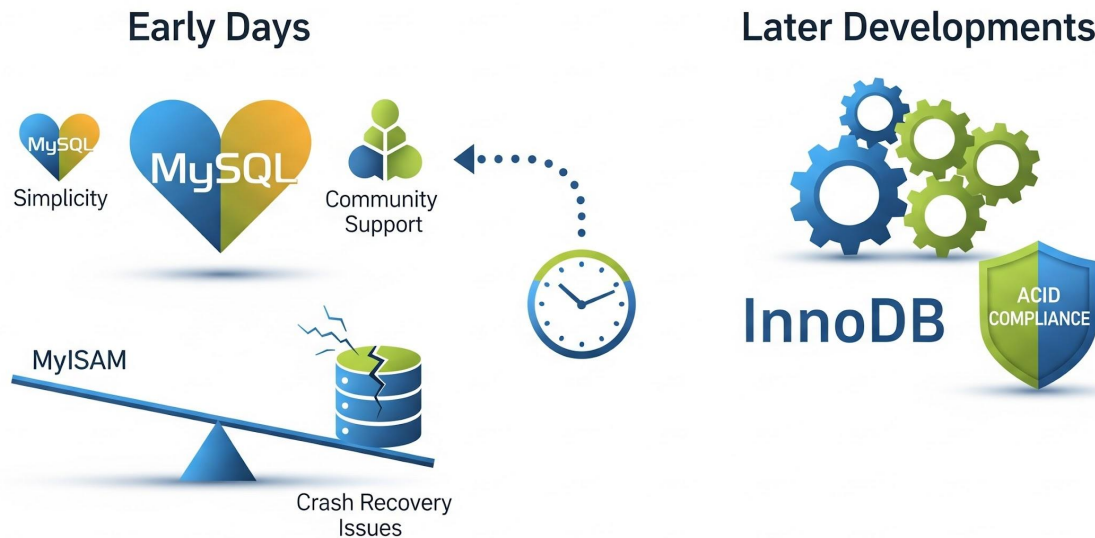Developer accessibility and reliability

Academic origins

MVCC

Extensibility

# The LAMP Stack Era



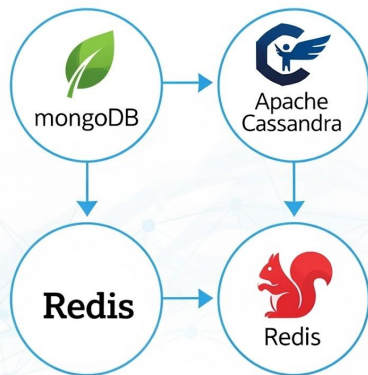Simple, cheap, and open – perfect for startups

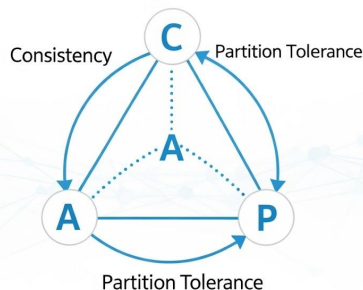# Developer-First, Ops-Later

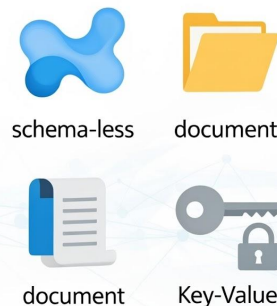# PostgreSQL: The Silent Giant

# The NoSQL Wave

# Cloud-Native Open Source Databases
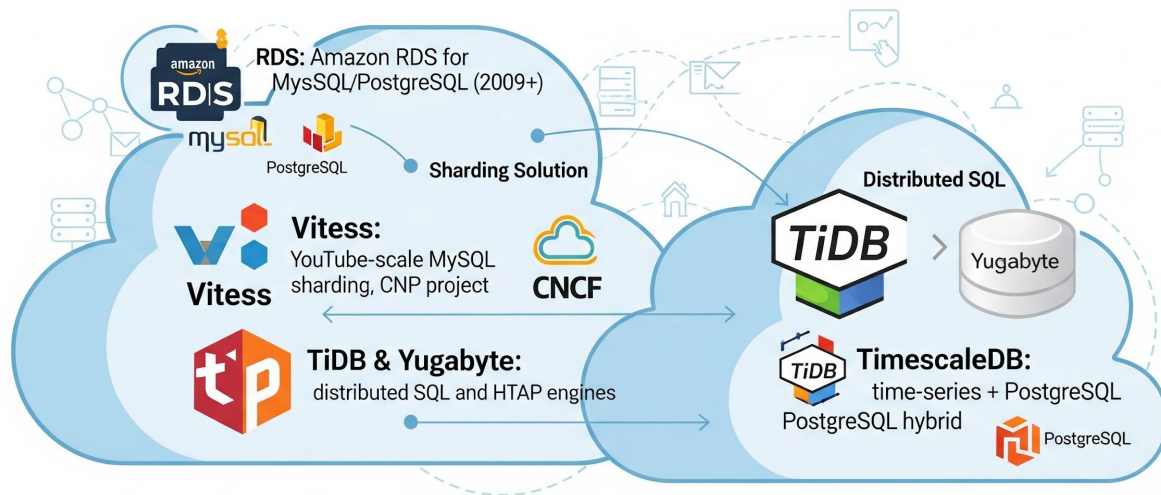
# The Rise of Managed + Serverless SQL

**Neon**

**PlanetScale**

**AlloyDB**

Postgres

Autoscaling Storage/Comute

Vitess-powered, Git-
-based worklows

Postgres

AlloyDB

Google Cloud Spanner

PostgreSQL interfaces

Cloud-native OSS becoming the database platform
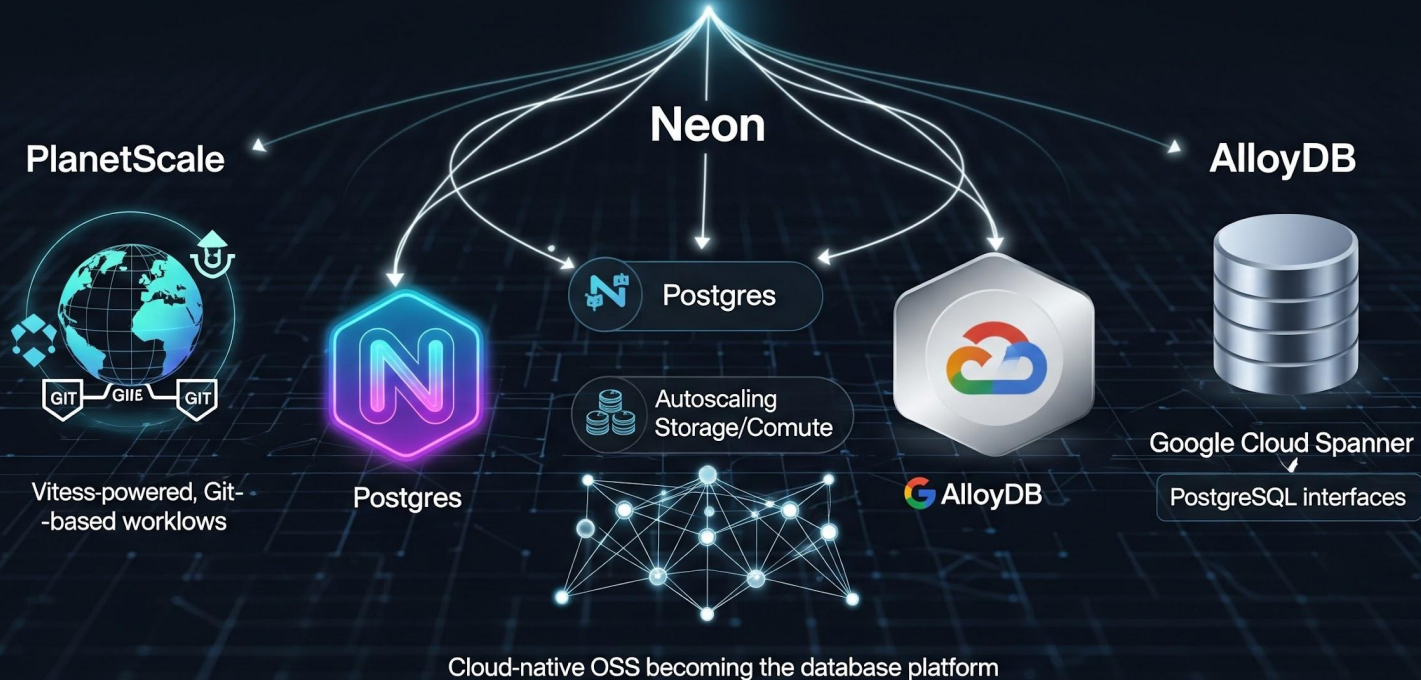
# Licensing Models in Open Source Databases
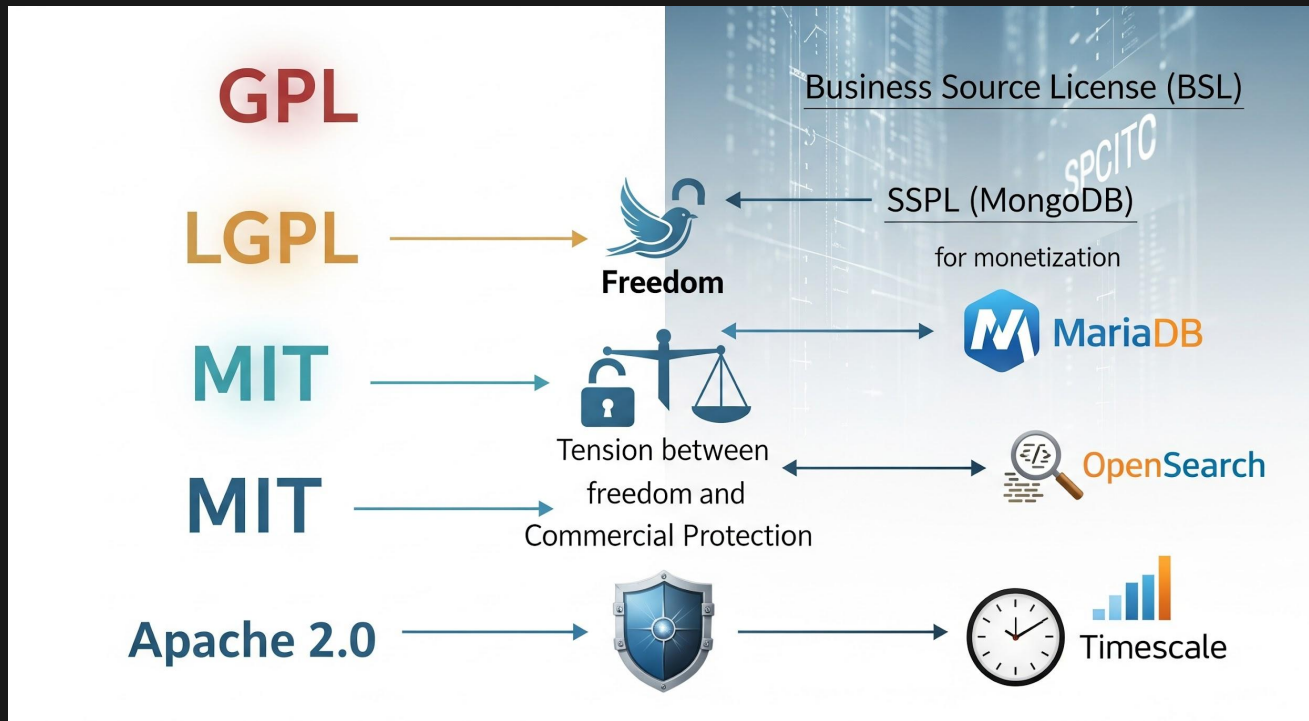
# Open Source Governance & Foundations

**PostgreSQL Global Dev Group**
independent and global

**Apache Software Foundation**
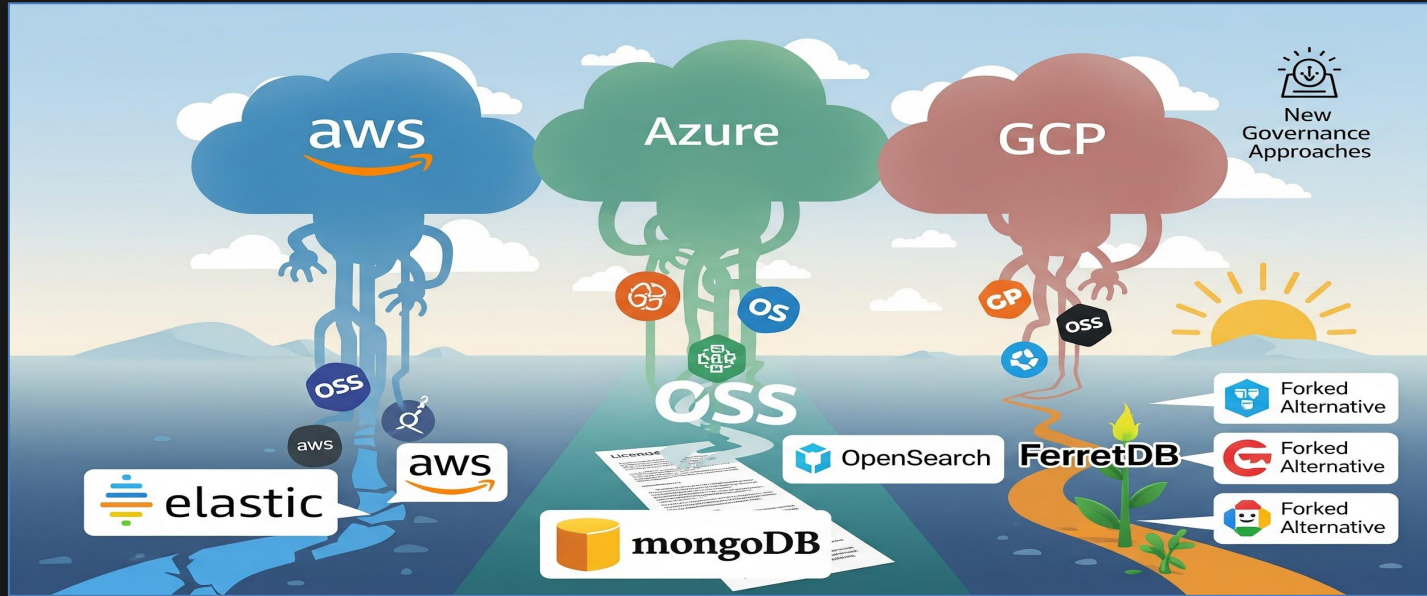Cassandra, HBase

**Linux Foundation**
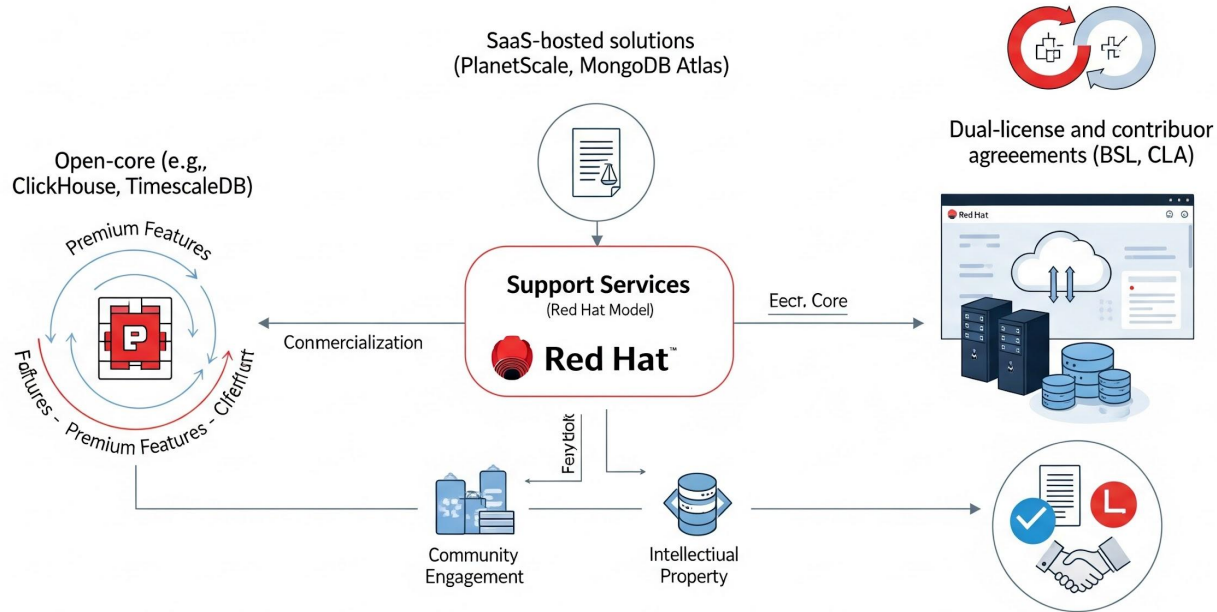OpenSearch, RISC-V

**FoundationDB**

**ClickHouse**   Community + corporate dual stewardship

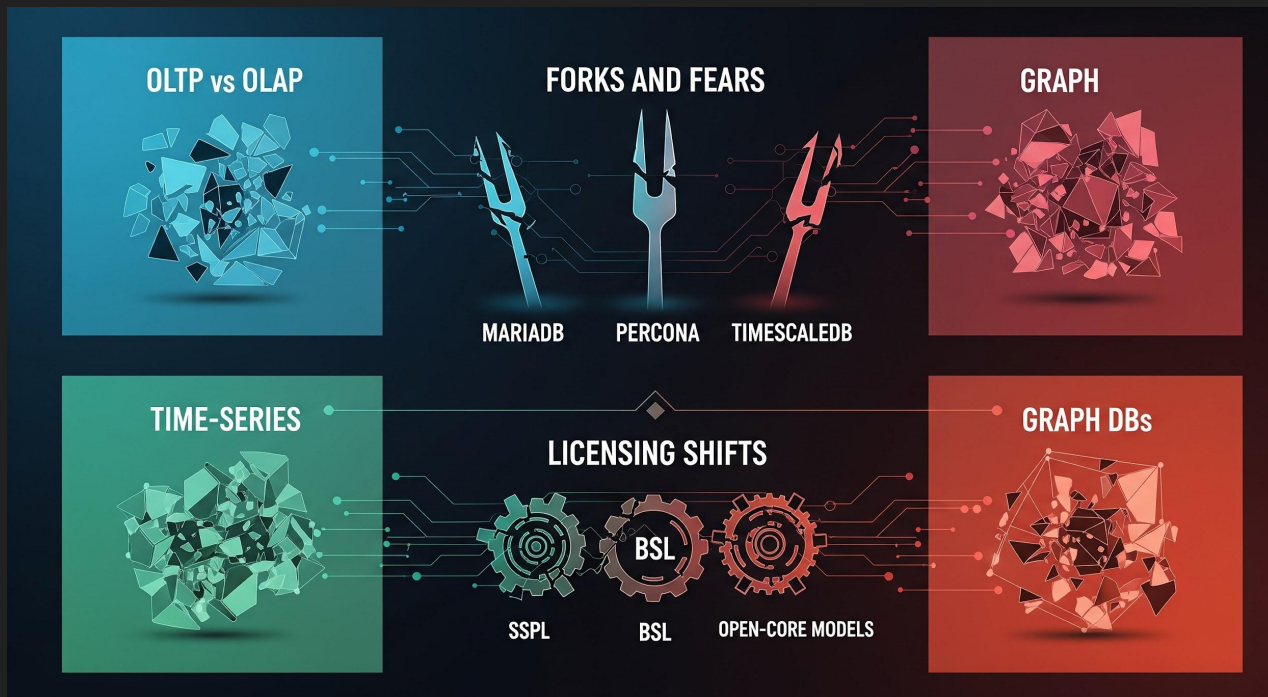# The Cloud Effect on Open Source
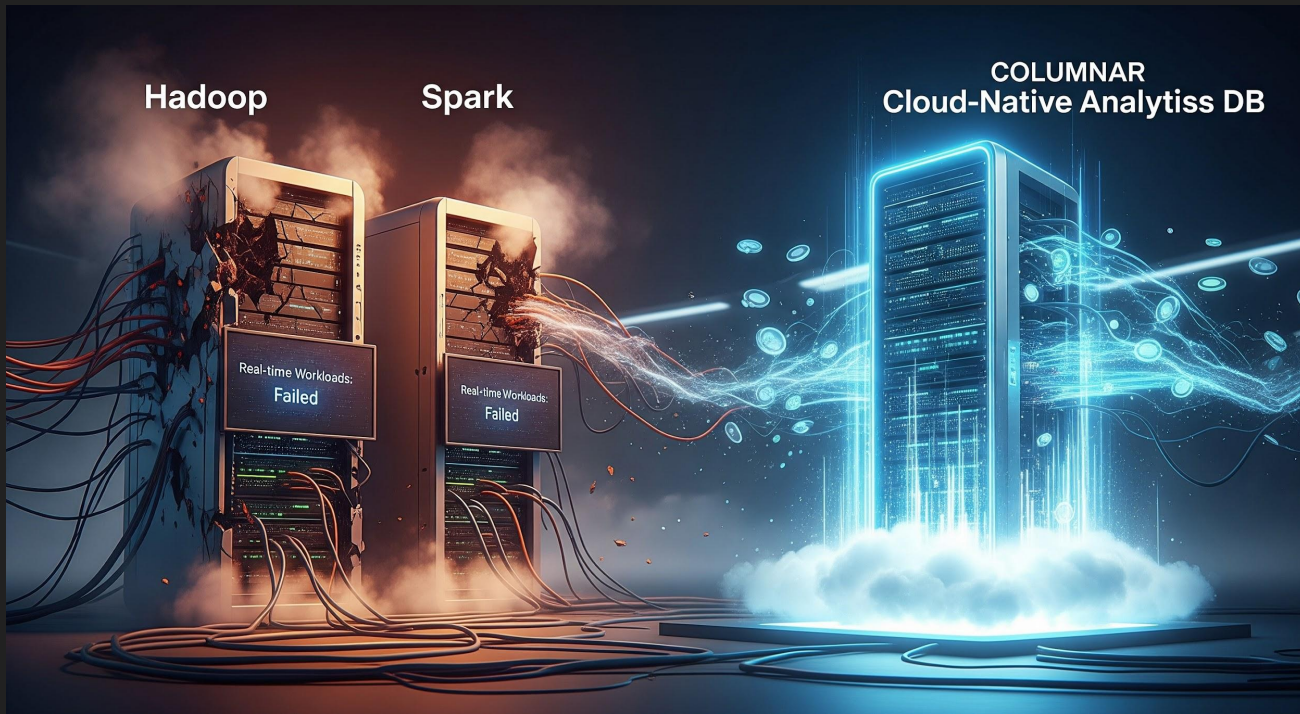
# OSS Business Models Evolve
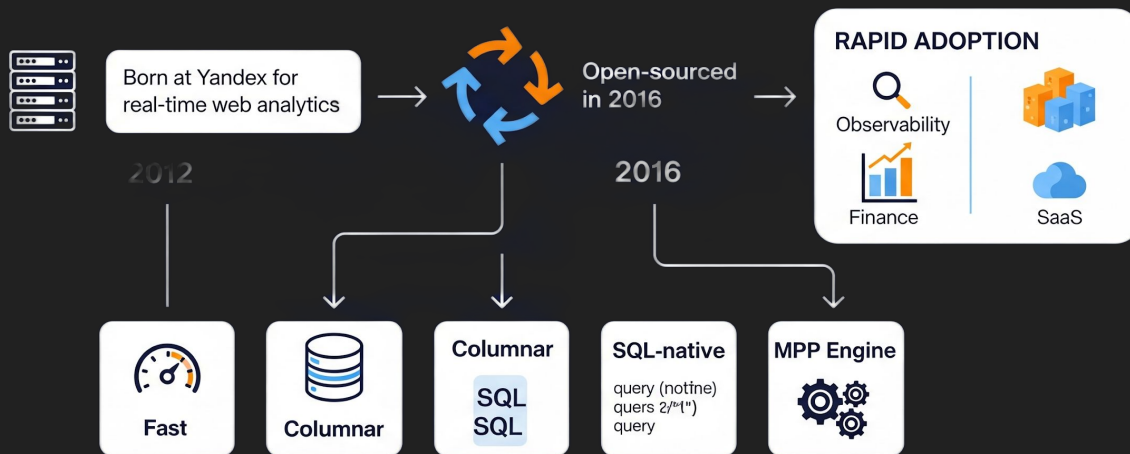
# Future-Proofing Open DB Ecosystems
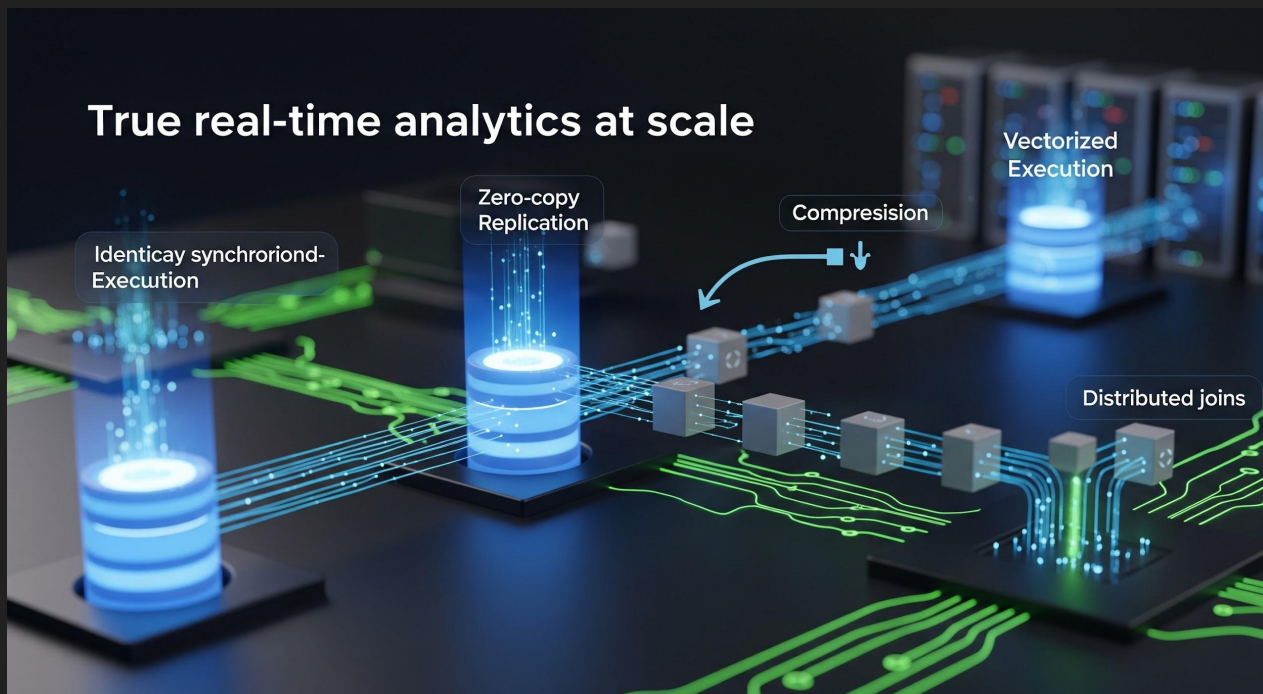
# Open Source Divergence
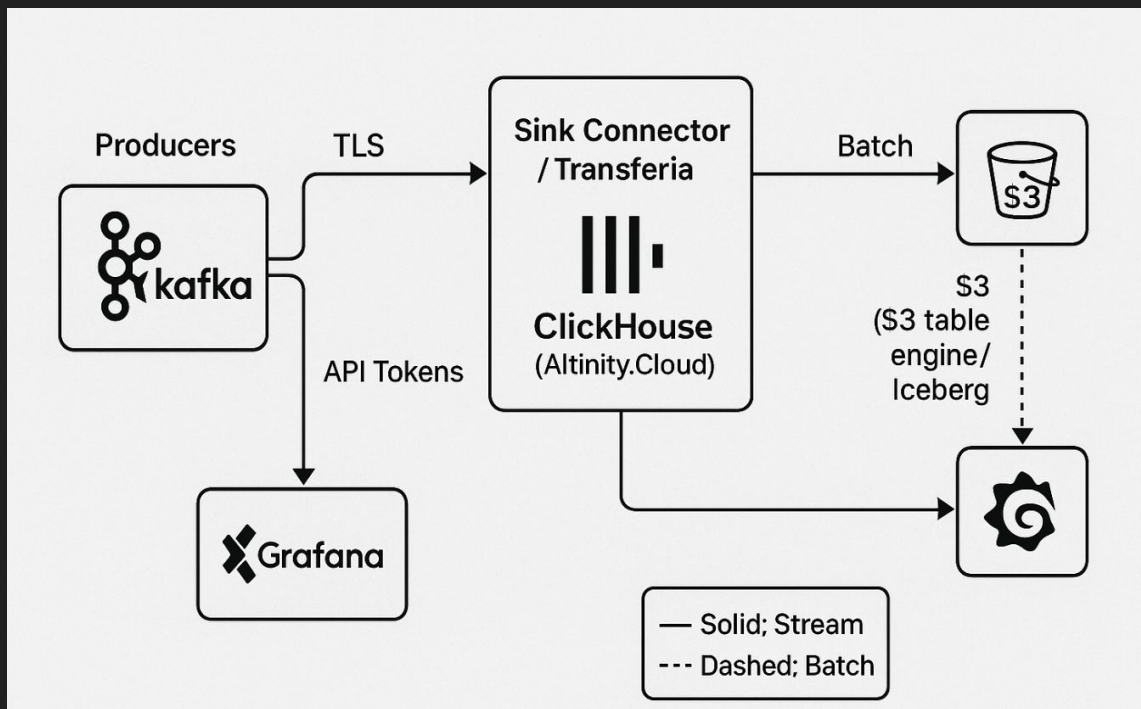
# What Changed? Cloud & Scale

# The Rise of ClickHouse



Born at Yandex for real-time web analytics

2012

Open-sourced in 2016

2016

RAPID ADOPTION

Observability

Finance

SaaS

Fast

Columnar

Columnar

SQL
SQL

SQL-native

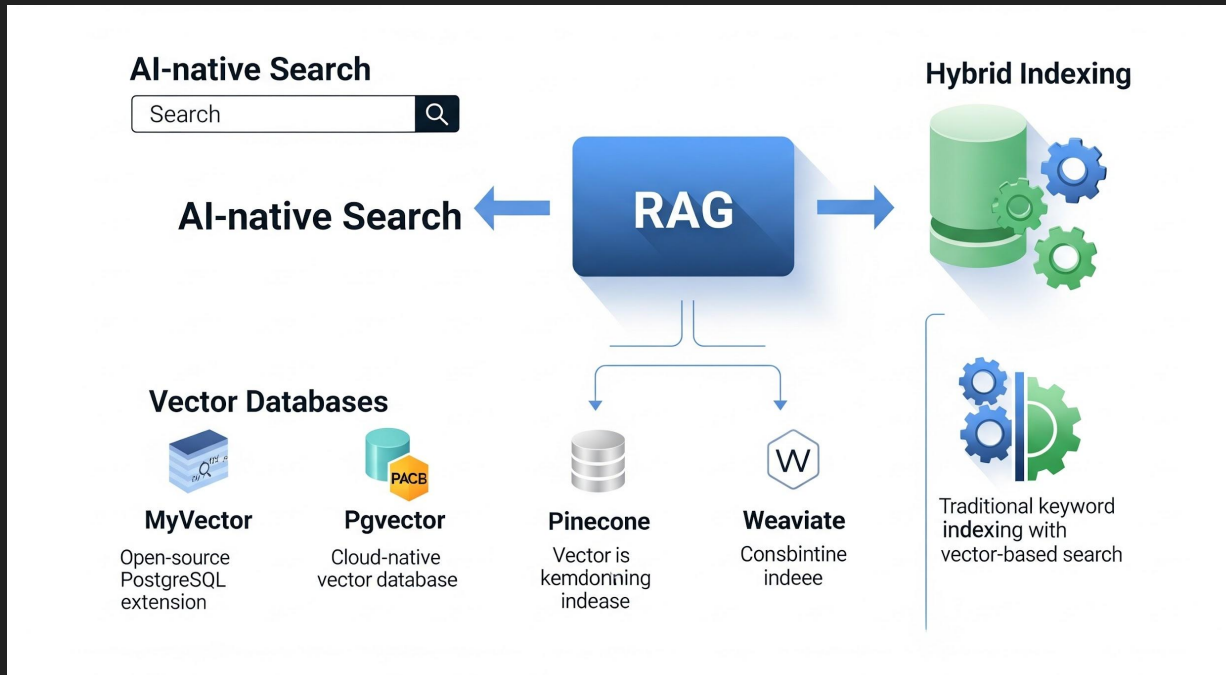query (notine)
quers 2/"(")
query
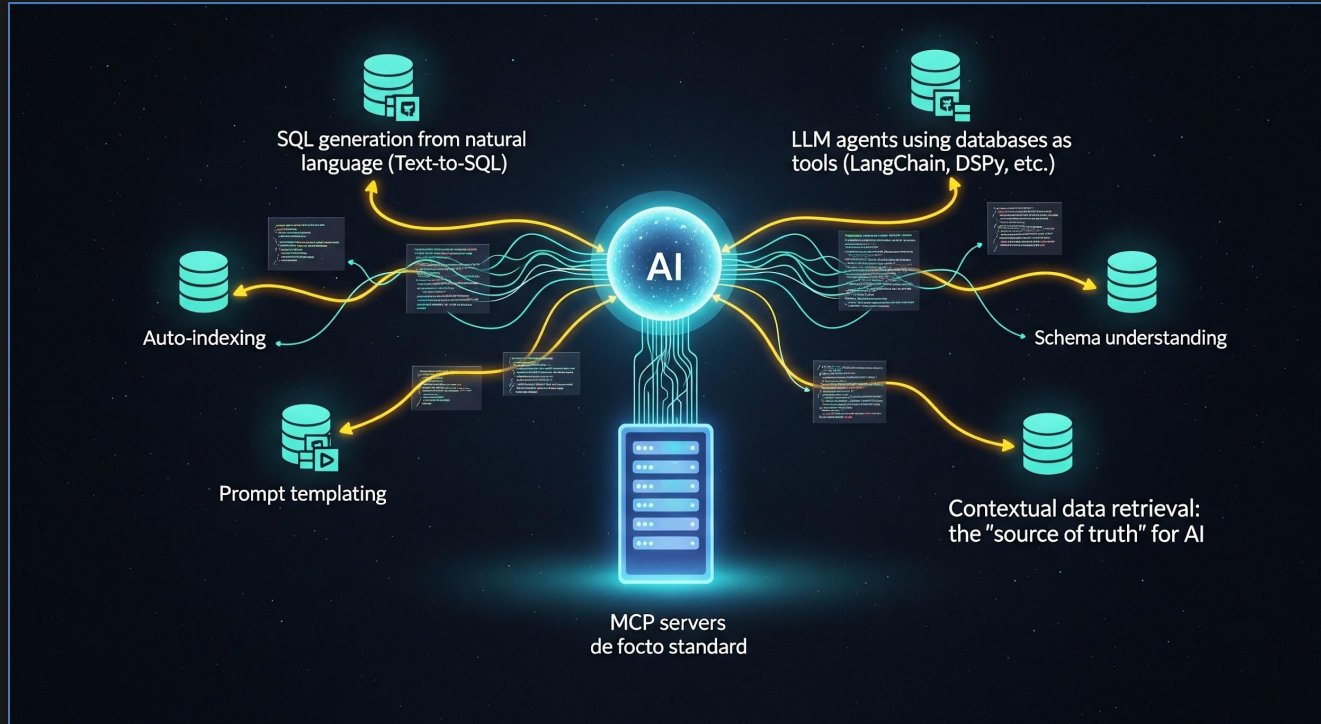
MPP Engine

# Why ClickHouse Changed the Game
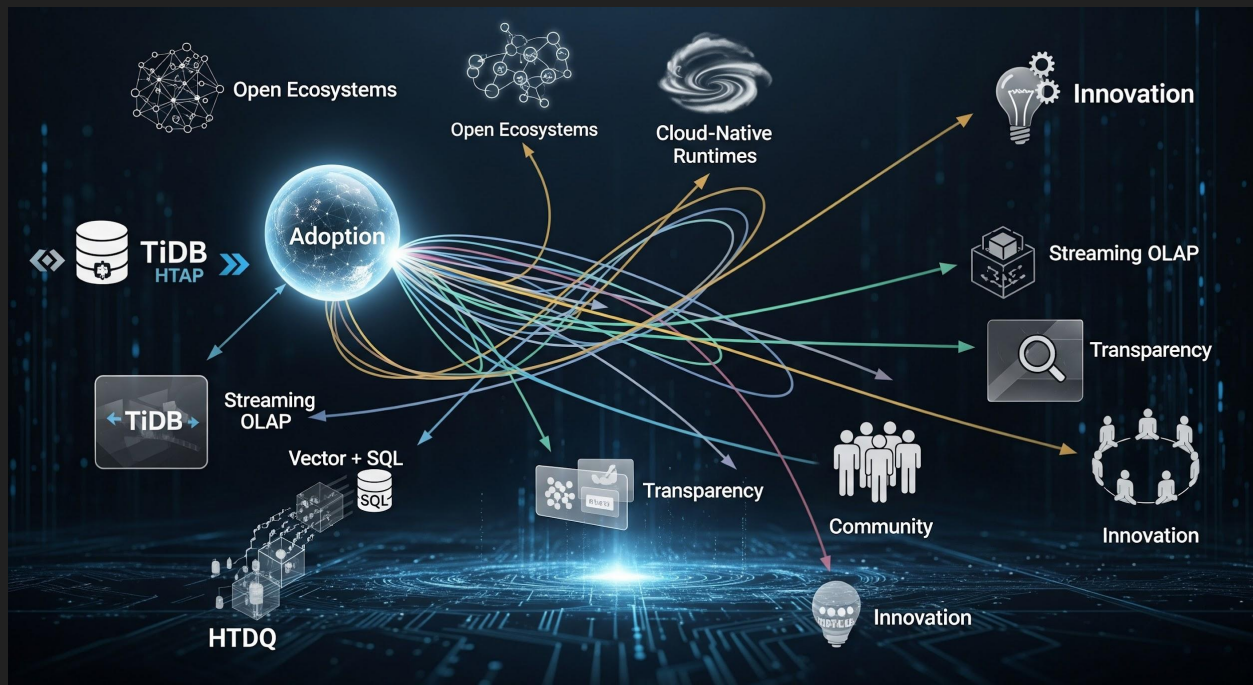
# The Modern Analytical Data Stack

# What's Next: AI & Vector-Native Workloads
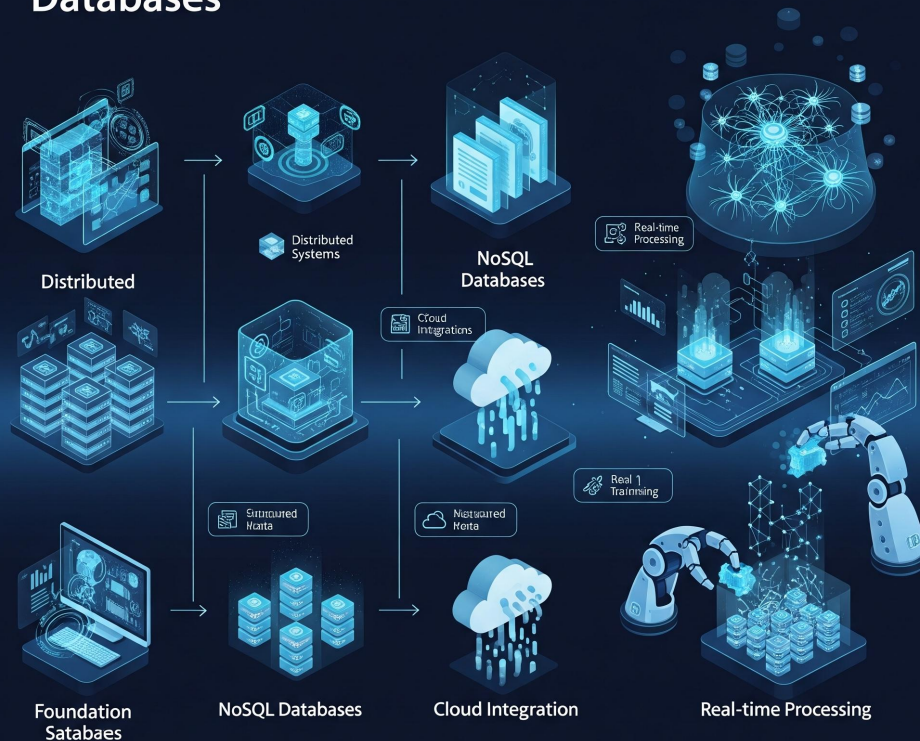
# LLMs Meet the Database

# The Future is Open (and Fast)

# Key Takeaways

- Presentation traces open source database evolution
- Explores impact on data and AI systems
- Highlights key eras and technological shifts
- Emphasizes open governance and community

# Thank You