Project Catalyst: The AI Use Case Inventory

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Objective of this document serves as the single source of truth for all existing and potential AI use cases. It is aligned with the "[Tiered Use Case Production Model](#)" to guide our content creation, resource allocation, and GTM strategy.

Tier 1: Inspiration Cases

Goal: Drive immediate, low-friction product exploration. **Primary CTA: Explore in Product**.

Mirror use case gallery for AI: https://pingcap.github.io/ai/examples/

Use Case Name	Description & Goal	Current Assets	Missing Assets (Gaps)	Strategic Fit
Semantic Search	Basic RAG: Showcases simple semantic search to find relevant documents. Goal is to be the "hello world" of vector search.	Code Snippet	Technical Blog Post, Video Screencast (30s), In-product deep link	Top-of-funnel, entry-level developer education.
Image & Text Search with CLIP	Multimodal Search: A ready-to-use example of building a powerful image search engine. Goal is to attract developers from the multimodal space.	Full GitHub Repo	Technical Blog Post, Polished Video Demo	High-impact, visually appeali demo for marketing.
Hybrid Search	A foundational example combining vector and full-text search. Goal is to provide a clear, simple starting point for hybrid queries.	Full GitHub Repo	Technical Blog Post, In-product tutorial link	Core educationa content for new users.
Filtering	As a relational database, TiDB supports a rich set of [SQL operators](#) and allows flexible combinations of filtering conditions that enable you to	Code Snippet	Technical Blog Post	Core educationa content for new users.

	conditions that enable you to query your data precisely.			
Auto Embedding	Auto embedding is a feature that allows you to automatically generate vector embeddings for text data.	Code Snippet	Technical Blog Post	Core educational content for new users.
CRUD with PyTiDB	Use PyTiDB Client to connect to TiDB Create a table with text, vector, and JSON columns Perform basic CRUD operations on data	Code Snippet	Tech Blog or Documentation	Core educational content for new users.
Parallel AI Reasoning	📎 [20250912-153734.jpeg](#)	Live Demo	Technical Blog Post, Video Screencast (60s, repurpose the one on summit)	Advanced concept, targets sophisticated architects.
Reason: Real-Time Recommendation	Hybrid Search: Shows how to combine semantic search with structured filters (e.g., in_stock = true). Goal is to teach the core value of unified queries.	Code Snippet	Technical Blog Post, Video Screencast (45s), In-product deep link	Key differentiat moves user beyond basic vector search.
Act: Fraud Detection Agent	Transactional AI: Demonstrates using transactions to reliably block a fraudulent event. Goal is to highlight ACID guarantees for AI.	Code Snippet	Technical Blog Post, Video Screencast (45s)	Critical for FinTech and E-commerce audiences.

Tier 2: Solution Cases (Customer Stories, PoC, etc)

Goal: Build credibility with high-value prospects and generate qualified sales leads. **Primary CTA: Book a Demo**.

Use Case Name	Description & Goal	Current Assets	Missing Assets (Gaps)	Strategic Fit
Dify.AI: Unified AI Backend	Consolidated 8+ databases into one TiDB cluster for metadata, context, and vectors. Goal is to showcase stack simplification and operational efficiency.	Logo, Customer Quote, Short Story	The Blueprint (Arch. Diagram), Technical Deep Dive, Customer Story Blog, The Brain (Founder Interview Video)	Perfect for startups/scale-ups feeling infrastructure pain.

TOPRISM: Conversational BI	Powers a real-time Chat2Query feature using TiDB's unified engine. Goal is to demonstrate how hybrid search enables complex analytics products.	Logo, Customer Quote, Short Story	**The Blueprint** (Arch. Diagram), **Technical Deep Dive**, **Customer Story Blog**, **The Brain** (CTO Interview Video)	Strong use case for the data analytics and BI space.
APTSell: AI Digital Sales Employee	Uses TiDB as a unified "brain" to connect CRM data, docs, and analytics for an agentic workflow. Goal is to showcase TiDB for complex, stateful agents.	Logo, Customer Quote, Short Story	**The Blueprint** (Arch. Diagram), **Technical Deep Dive**, **Customer Story Blog**, **The Brain** (CEO Interview Video)	Excellent for sale tech and enterprise automation.
Omolab Games: AI-Powered Gaming	Building AI-driven gaming experiences on TiDB Cloud. Goal is to show TiDB's versatility in a high-performance, real-time industry like gaming.	Logo, Interview Notes, Website Link	**The Blueprint** (Arch. Diagram), **Technical Deep Dive**, **Customer Story Blog**, **The Brain** (Founder Interview Video)	Entry point into the competitive gaming market.
[Crowdsnap.ai](#): AI Event Platform	Using AI to manage and analyze event data. Goal is to prove TiDB's value in event-driven architectures and real-time data processing.	Logo, Interview Notes	**The Blueprint** (Arch. Diagram), **Technical Deep Dive**, **Customer Story Blog**, **The Brain** (Founder Interview Video)	Relevant for MarTech, IoT, and event-heavy platforms.
GitHub Issues Copilot (Anonymous case)	Automatically identifies duplicate issues upon creation using hybrid search. Goal is to provide a relatable, high-value DevTool example.	Concept, Code Snippet	Full GitHub Repo, The Blueprint (Reference Arch.), Technical Deep Dive, Polished Video Demo	Excellent for winning hearts and minds of developers.
GraphRAG for IT Support (Anonymous case)	A cutting-edge GraphRAG architecture built on TiDB to reduce IT support ticket resolution time by 70%. Goal is to be our flagship advanced RAG solution.	Concept, Customer Context (Retail Giant)	The Blueprint (Reference Arch.), Technical Deep Dive, Polished Video Demo, One-Click Deploy	Thought leadership, targe advanced AI/ML teams.
SDR Sales Copilot	Generates hyper-personalized outreach based on CRM data and call logs. Goal is to be a powerful business-oriented demo for sales/marketing tech.	Concept, Code Snippet	Full GitHub Repo, The Blueprint (Reference Arch.), Technical Deep Dive, Polished Video Demo	High business impact, great for executive demos

Tire 3: Sandbox / Launchpad Cases

Goal: Drive product adoption with low-friction, "clone and go" experiences. **Primary CTA: Easy deploy.**

Use Case Name	Description & Goal	Current Assets	Missing Assets (Gaps)
LangChain Agent with TiDB	A complete LLM-powered agent that queries both vector and SQL data. Goal is to be the definitive "getting started" template for building agents with TiDB.	Full GitHub Repo	**The Blueprint** (Reference Arch.), **Technical Deep Dive**, Polished Video Demo, One-Click Deploy Button
Intelligent Data Analysis with TiDB + MCP	Enables developers to connect TiDB directly to AI agent platforms (like Claude Desktop) using the Model Context Protocol, allowing the agent to use TiDB as a tool for complex data analysis via natural language.	**The Story:** Yes (Intro, "Why MCP Matters") **The Blueprint:** Yes (Architecture Diagram) **The Code:** Yes (Full GitHub Repo via PyTiDB) **The Brain:** Yes (Authored by Senior SW Engineer) **Technical Deep Dive:** Yes (The blog post itself) **Video Demo:** Yes (Embedded video of the agent workflow)	**Main Page / Entry Point:** Needs a dedicated card in the future Use Case Gallery with a clear "Deploy this Solution" link. **Polished Video Demo:** The existing video is a great screencast. A more polished, professionally edited version could be created for wider marketing use. **Social Media Kit:** A standardized kit (3-5 suggested posts, visual) needs to be created to make this a repeatable GTM asset.
[Build Simple Vector Search Apps Using Jupyter Notebook TiDB Cloud Starter|60 Mins](#)			
[Build RAG and Text2SQL AI Apps (OpenAI) TiDB Cloud Starter|90 Mins](#)			
[Build GraphRAG and Tool Calling AI Agent Using TiDB (OpenAI) TiDB Cloud Starter|60 Mins](#)			
[Build RAG and Text2SQL AI](#)			

[Build RAG and Text2SQL AI Apps (Amazon Bedrock) TiDB Cloud Starter|90 Mins](#)			
[Use TiDB as a Unified Storage for AI Apps (Amazon Bedrock) TiDB Cloud Starter|90 Mins](#)			
[Use TiDB as a Unified Storage for AI Apps (OpenAI) TiDB Cloud Starter|90 Mins](#)			

考虑 organic + direct + referral，甚至已经在用vector、但是可以通过这些 inspiration 扩大用量的：

- + lab 平台直接 explore & 登陆
- 整个链路的设计要明确一下
- tidb.cloud 直接登陆的 - 这个use case gallery 怎么植入 onboarding 流程？