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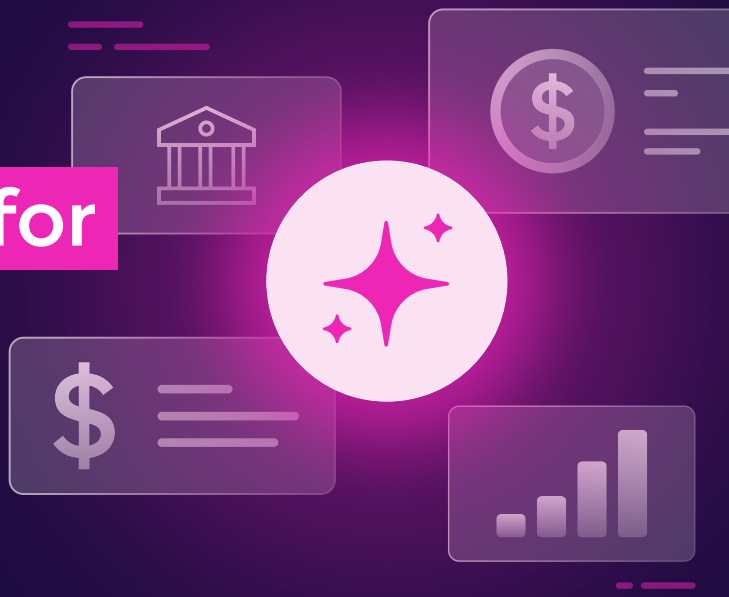
# AI Maturity Model for Financial Services

## A Brief Guide to Tracking Your Transformation to AI



AI is having a huge impact in many industries, finance included. This AI maturity model outlines how fintech and financial services companies evolve in their use of AI — evolving from tactical adoption to industry leaders. It tracks how deeply AI becomes embedded across **risk management, operations, customer experience, and innovation.**

Read on to determine where you are in your AI journey and, most crucially, how to progress to becoming an industry leader in AI adoption.

Stage 1

### AI Foundations: Operational Efficiency with Off-the-Shelf AI

At this stage, companies focus on efficiency. They adopt prebuilt AI solutions — fraud models, compliance tools, or third-party chatbots — without building their own. AI is tactical, not strategic.

#### Implications

- Heavy reliance on external vendors limits differentiation.
- AI enhances operations but doesn't set the business apart.

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Stage 2

## AI Differentiation: Enhanced Merchant & Customer Value

Here, internal teams begin training models on proprietary data. They tailor fraud detection, develop merchant-specific assistants, and introduce early embedded AI agents. These agents act within workflows but remain assistive, not fully autonomous.

### Implications

- Companies start to stand out with smarter dashboards and personalized support
- AI adds value but is still largely supportive, not decision-making.

### Examples

- Real-time merchant analytics and anomaly alerts.
- Customer-support bots with intent recognition.
- AI-driven routing for transaction approvals.

Stage 3

## AI Platform Expansion: Ecosystem Enablement

AI shifts from isolated tools to a platform strategy. Companies productize their AI capabilities, exposing them as **APIs, SDKs, or embedded services** for merchants and partners. Building AI agents becomes a core competency.

### Implications

- AI evolves into a competitive moat.
- Partners and merchants rely on in-house AI agents.

### Examples

- Fraud and risk models offered as APIs.
- Autonomous agents handling routing or dispute resolution.
- Fintech partnerships embedding AI-driven lending, pricing, or BNPL decisioning.

Stage 4

## AI Market Leadership: Shaping the Future

AI agents become **fully autonomous actors**, recognized and monetized as part of the financial ecosystem. Companies set global standards and influence regulation, moving from adoption to leadership.

### Implications

- Market leaders not only use AI — they shape the industry's future.

### Examples

- AI agents negotiating FX rates or settlements in real time.
- Cross-border compliance handled without human intervention.
- Participation in CBDC, tokenized payments, and AI-driven regulatory pilots.

# Your Journey to Monetizing Data and AI with Production-Safe Agents

The ability to build AI agents in-house is the true marker of AI maturity. While off-the-shelf agents may work in demos, they rarely deliver long-term value. If you can't build agents, you risk depending on external vendors — and falling behind.

Now imagine embedding customer-facing agents directly into workflows and applications, then offering them as products to your customers.

**Here lies the challenge:** agents demand new levels of scale, reliability, and trust. Unlike humans, they can run **tens of thousands of processes in parallel**, but they must also be absolutely reliable. A single mistake or data leak can destroy trust forever.

That's why production-safe agents must meet **four essential requirements**:

## 1. Knowledge as Foundation

Equip agents with well-structured, comprehensive knowledge of your business. Use ontologies — formal specifications of structured and unstructured data — to ensure answers are always grounded in context.

## 2. Defined Workflows and Orchestration

Agents need clear rules for planning, escalation, and tool usage. Orchestrated workflows provide transparency and enforce digital “guardrails,” ensuring agents act safely and predictably.

## 3. Awareness of LLM Strengths and Weaknesses

Leverage LLMs where they excel — intent recognition, summarization, and code generation. Avoid misusing them for tasks requiring strict logic or determinism, where simpler, rule-based systems are more reliable.

## 4. Security and Reliability at the Core

Agents must be built with privacy, auditability, and fact-grounding as non-negotiables. Hallucinations, data leaks, or unverifiable outputs undermine trust and adoption.

## Uncover Your Data Goldmine with Embedded AI Agents

AI agents represent a new frontier in financial services — driving efficiency, creating differentiation, and shaping industry standards.

**Ready to explore what production-safe agents can do for your business?** Request a demo of GoodData, the leading full-stack data intelligence platform.