



CORE BANKING MEETS AI: THE NEXT PHASE OF BANKING TRANSFORMATION

Abstract

The banking industry is undergoing a significant shift as institutions look beyond traditional modernization efforts to meet rising demands for efficiency, customer experience, and risk management. Artificial intelligence is now offering banks a faster, complementary path: using AI to change how people work with the systems, data, and processes they already have, rather than waiting years for a platform rebuild. This PoV examines how AI, automation, and core banking platforms can operate together as an integrated system, and explores the real, often underestimated, work behind that model — governance, legacy integration, data readiness, and operating model design. The success of banking AI initiatives depends less on the technology itself and more on how ready the surrounding ecosystem is to support it.



Introduction: Beyond replacing the core banking platform

Every conversation around banking transformation arrives at the same slide: a box for the core banking platform, a box for AI, a clean arrow connecting them. On a program, it's rarely that simple.

Banks have always faced the same pressures — better customer experience, lower cost, managed risk, and the ability to keep pace with change. For two decades,

the default answer was to modernize the core banking platform: rip out the old platform, rebuild it, migrate the data. It works, but it's slow, expensive, and rarely painless.

AI now offers a different route — changing how people work with existing systems rather than replacing them. Uptake has been fast: roughly 75% of UK financial

services firms already use AI, with another 10% planning to do so within three years (Source: Bank of England and FCA report). Firms expect the biggest gains from operational efficiency and cost reduction, not reinvention.

In short: AI isn't replacing the core banking platform. It's making it easier to work with.

75%

of UK financial services firms are already using AI

(Source: Bank of England and FCA, AI in UK Financial Services Survey (2024))

AI as a modernization lever, not a replacement

Core platforms handle the heavy lifting — accounts, transactions, ledgers, regulatory records — and none of that changes with AI. What changes is everything happening around core banking platforms: staff

juggling multiple applications, digging through policy documents, manually stitching information together.

AI pulls that information together, spots patterns, and points employees to the right

next step — producing shorter handling times, faster onboarding, and better risk-spotting across operations, relationship management, and financial crime functions alike.



Shorter handling
times



Faster turnaround on
requests



Less switching between
systems



Faster access to policy
guidance



More consistent servicing



Quicker onboarding of new staff



Better spotting of risks and exceptions

Where employee-facing AI tends to move the needle first

For a bank with fully depreciated legacy systems, using AI to extract more value

from existing investments is attractive. However, AI should support modernization,

not replace it.

Where the real work actually is

The line between AI and core banking on the architecture diagram below is where almost all the real program effort lies, across five areas:

- **Governance:** AI in a regulated bank triggers reviews across security, privacy, risk, and model governance. The governance framework must be built in from day one, not bolted on at the end.
- **Core integration:** Older platforms were not built for AI integration, and the required APIs often do not exist. A

“quick” integration can quietly become a full project once the core banking platform’s data limitations surface.

- **Data and environment readiness:** Production data may be sound, but test environments are often outdated or incomplete. The same customer or transaction may also fail to match across core banking, CRM, and other systems — an issue that usually surfaces only during end-to-end testing.

- **Operating model:** Banks without an established AI framework often end up making decisions about identity, monitoring, exception handling, and audit trails in real time during their first project.
- **Post-go-live change:** Core vendors push periodic upgrades, and even small field-level changes can quietly break automation logic. Visibility into a core banking platform’s release calendar matters as much as the build itself.

To summarize these key points:

Governance and controls

Security, privacy, risk reviews, and model governance — built in from day one, not at the end

Legacy integration

Older banking cores often lack the APIs that AI needs — a quick build can become a full project

Data and environment readiness

Test environments and data must match production and stay in sync across every application in scope

Architecture and operating model

Identity, monitoring, exception handling and audit trails need a clear framework from day one

Ongoing change management

Core banking application upgrades and screen or field-level changes can quietly break automation after go-live — visibility into the banking core’s release calendar needs to be built in, not left to chance

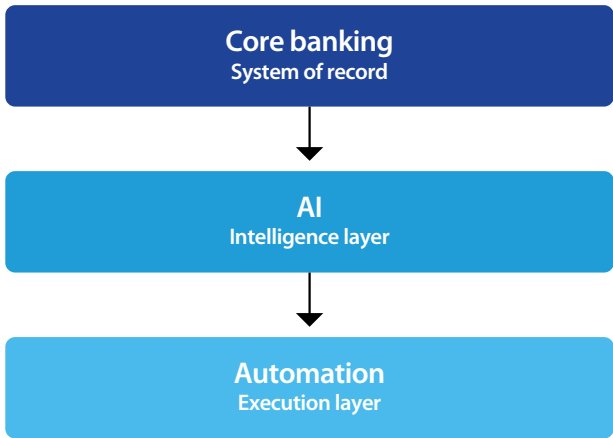
The challenge is rarely the AI. The challenge is preparing the ecosystem around it.

Why the core banking platform remains essential

Will AI eventually make core banking systems unnecessary? It's unlikely. Core banking platforms protect the integrity of transactions; AI is good at interpreting information and recommending next steps,

which is a different job entirely. The common shorthand — core banking as the system of record, AI as the intelligence layer, and automation as the execution layer — is a useful mental model, but

only a starting point. Whether it holds up depends on the governance, integration, readiness, and change-management work covered above.



The core stays the system of record; AI adds intelligence; automation carries actions through.

Some newer core platforms now build in their own intelligence and workflow features. Even so, many banks still need a broader AI layer capable of orchestrating

across CRM, document systems, and operational channels — something a single platform's native features usually can't do alone.

The real decision is not “core banking or AI” — it is how to combine core banking, AI, and automation so that each plays to its strengths.

From assistants to agents

Most banks start with copilots and assistants that help staff search, summarize, and find policy faster — a sensible, trust-building first step.

recommends actions, and hands off approved tasks for execution, with a human still in the loop for anything high-stakes.

decision-making, but only 2% are fully autonomous (Source: Bank of England and FCA report). The industry is comfortable letting AI assist, but it is not yet ready to remove people from ambiguous or regulated decisions.

The next stage is agentic: an AI agent gathers information, flags exceptions,

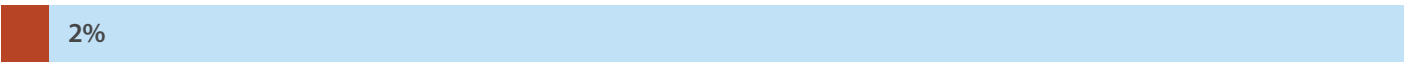
The numbers reflect this caution: 55% of AI use cases involve some automated

How AI use cases actually make decisions today

Involves some automated decision-making



Fully autonomous, no human in the loop



Bank of England and FCA, AI in UK Financial Services Survey (2024)

What actually works in practice

A few lessons recur across programs. Assess readiness before committing to a use case, not midway through delivery. Bring in core specialists early — one integration gap can consume more time than everything

else combined. Size the automation layer for real transaction volumes, not demo conditions. Involve risk, compliance, and architecture stakeholders from the start. Finally, begin with employee-assist

use cases and build reusable patterns for access and oversight so that each subsequent use case moves faster than the last.

Six lessons that repeat across every program

- ✓ Assess readiness before the use case is committed.
- ✓ Plan for integration, security, and governance early.
- ✓ Bring in people who understand the core system early.
- ✓ Size the automation layer for real transaction volumes.
- ✓ Involve risk, compliance and architecture from the start.
- ✓ Start with augmentation, then build toward automation.

Reusable patterns from the first use case make every use case after it faster to deliver.

Next steps: where to start

Rather than jumping straight to a platform and use case, a more reliable path looks like the following:

Six steps to get started

1. Follow workshops with an AI-assisted prototype — see the real friction and review points before you build
2. Score ecosystem readiness, not just the use case — governance, integration, data, operating model, upgrade cadence
3. Involve core specialists and governance from day one — not at a review gate, once the build is already underway
4. Size automation for real transaction volumes — before building, not after gaps are revealed during the go-live phase
5. Track the core platform's release calendar — so upgrades don't silently break automation later
6. Start with augmentation, then scale deliberately — build reusable patterns so the next use case moves faster

These steps do not require a large program. A discovery prototype can run in weeks,

turning these principles into a concrete,

organization-specific plan.

The road ahead

AI gives banks a real opportunity to improve productivity and get more value from what they've already invested in — but that value depends on the readiness of the data, integration, governance, and

operating models, not on the platform chosen.

Core banking will keep doing what it's always done; AI will be present around it, adding intelligence, while automation

carries approved actions through.

The next phase of banking transformation isn't AI replacing the core; it's the core, AI, automation, and the people running it all, learning to work as one system.

Authors



Edmond Prasad

is Senior Program Lead – Business Transformation at Infosys BPM, with experience supporting banking transformation, operating model optimization, automation, and AI-driven initiatives across banking operations. His work focuses on helping financial institutions unlock business value through process transformation, emerging technologies, and practical modernization strategies.



Megha Kochhar

is Industry Principal at Infosys BPM with extensive experience in banking and financial services transformation. She advises clients on strategic transformation initiatives spanning operating model optimization, digital modernization, automation, and AI adoption. Her work includes solution shaping, consulting-led engagements, proposal development, and helping organizations translate transformation opportunities into measurable business value.

For more information, contact infosysbpm@infosys.com



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