

The Data & AI Maturity Gap

Why some financial institutions scale AI
while others remain in pilot mode

THE OPENING PREMISE

Most institutions do not have an AI access problem.

They have a path-to-production problem.

Models can be bought.

A regulated operating capability has to be built.

Adoption is broad. Material scale is not.

FIRMS USING AI

75%

of surveyed UK financial
firms already use AI



MATERIALITY OF REPORTED AI USE CASES

62%

of reported AI use
cases are low
materiality



16%

of reported AI use
cases are high
materiality



Bank of England and FCA, Artificial intelligence in UK financial services, 2024; 118 respondents.

A pilot tests a model. Production changes a system.

PILOT

Can the model
do the task?



PRODUCTION

Can the workflow
deliver?

Bounded data
Small technical team
Cooperative users
Temporary controls

Live systems and owned data
Named business accountability
Testing and monitoring
Measured economics

The maturity gap sits between technical possibility and dependable operating performance.

A falsifiable thesis

Among comparable institutions, three conditions should predict faster movement into valuable production:

01

**Business-owned
workflows**

02

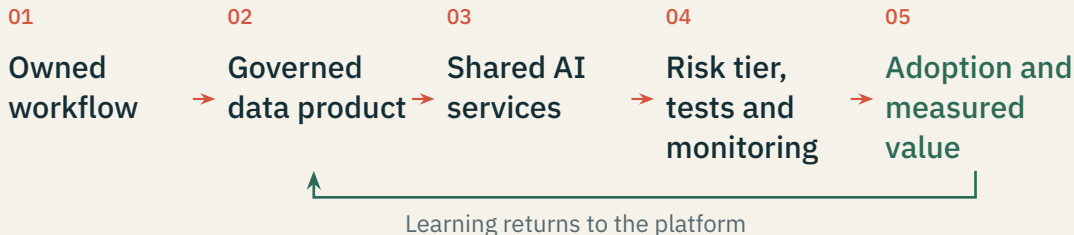
**Reusable data
and platforms**

03

**Proportionate
controls**

Test against deployment speed, component reuse, adoption and measured business value.

Leaders describe a production system



The advantage is a **falling marginal cost of deployment**, not one superior model.

Pattern synthesised from DBS, JPMorgan Chase, Goldman Sachs, ING, Deutsche Bank and Commonwealth Bank disclosures.

The unit of transformation is the workflow

JPMORGAN CHASE CIB

Transaction screening

>2x

review volume

With half the manual
operator checks

GOLDMAN SACHS

One Goldman Sachs 3.0

6

starting workstreams

Organised around
front-to-back processes

JPMorgan Chase CIB and Goldman Sachs annual reports, 2025. Figures and descriptions are company-reported.

Centralise the foundation. Federate the outcome.

Central foundation

Architecture Data standards Model access Risk tiers Supplier controls Evaluation



Fraud operations

Owns losses and
false positives



Client onboarding

Owns time and
completion



Software delivery

Owns quality and
cycle time

A remote centre of excellence can create prototypes. Only the business can own adoption, risk and realised value.

McKinsey review of 16 large financial institutions, 2024: production was more common in centrally led models; small, non-random sample.

Change the backlog

TECHNOLOGY BACKLOG

Chatbot
Copilot
Agent
Prediction model



BUSINESS BACKLOG

Onboarding time
Fraud loss
False positives
Adviser capacity

AI becomes one component of a redesigned service, with a baseline, owner and economic measure.

Data maturity does not mean cleaning everything

Six conditions for **one valuable workflow**

01 Authoritative source

04 Access rules

02 Named owner

05 Quality threshold

03 Usable lineage

06 Correction loop

Many data-quality problems begin with unclear decision rights.

BCBS 239 progress reports, BIS FSI 2026 and ECB Banking Supervision 2025.

Governance can be a gate or a paved road

BESPOKE CONTROL

Every use case
starts again

Late risk engagement
Different evidence requests
Committee queues
Manual control records



REUSABLE CONTROL

Evidence is built
into delivery

Materiality and autonomy tiers
Approved patterns
Automated test and audit records
Monitoring and escalation

PRA SS1/23; Bank of England AI roundtables, February 2026. Proportionate scrutiny remains essential.

Invest in the current bottleneck

1 Valuable workflow + baseline

2 Persistent cross-functional team

3 Owned domain data product

4 Shared AI and integration services

5 Evaluation, monitoring and role-specific adoption

Model licences and compute are inputs. Funding them before ownership and access can increase the number of stranded pilots.

Synthesis of regulatory evidence, enterprise studies and leading-bank disclosures.

The strongest objection is partly right

WHAT THE THESIS CANNOT ERASE

Capital and engineering depth

Legacy architecture

Cross-border regulation

Supplier concentration

Model reliability

WHAT STILL NEEDS EXPLAINING

Broad access to capable models

Uneven material deployment

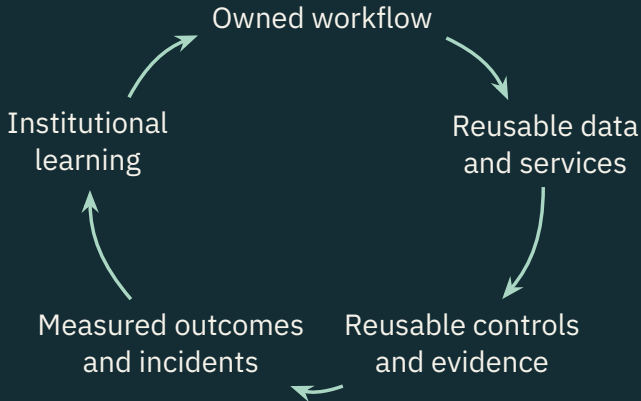
Greater complexity at scale

Persistent adoption gaps

Company disclosures are selective and maturity surveys are correlational. The claim is a mechanism, not a universal causal estimate.

Maturity compounds through reuse

Lower cost
of the next
deployment



Pilot mode resets fixed costs. Mature institutions retain learning in platforms, controls, data contracts and roles.

Measure the path, not the theatre

CAPACITY METRICS

Model count

Employee licences

Experiment count

Training attendance

MATURITY METRICS

Time to controlled production

Component reuse

Workflow adoption

Benefit against baseline

Control exceptions and incidents

The scorecard should expose whether each deployment makes the next one easier.

THE CONCLUSION

Competitive advantage is
a falling cost of deployment.

Turn uncertainty into controlled value.
Then do it again.

Build the path once. Measure it. Improve it with every deployment.

Selected sources

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