

Pitfall

Data silos: Teams cannot trust outputs when source systems disagree.



Poor data quality: Models inherit missing, stale, or inconsistent inputs.



Skill gaps: Business teams depend on small technical teams for every workflow change.



Integration complexity: Outputs stay trapped in dashboards instead of reaching operational systems.



Cost overruns: Usage-based infrastructure and tooling costs grow without clear controls.



Governance risks: Access, lineage, and model approvals are added too late.



Mitigation

Prioritize shared data access, ownership, and metric definitions before scaling use cases.

Build quality checks into ETL/ELT workflows before production deployment.

Use visual and guided development with role-specific training to expand who can build.

Validate APIs and workflow integrations during vendor shortlisting, not after contract signature.

Require cost model transparency and monitor consumption during pilots.

Build lineage, access controls, and approval workflows before the first model reaches production.