MIGRATION PLAYBOOK TEMPLATE

A Step-by-Step Framework for Safe Technology Migrations

For Architects and Engineering Managers

WHAT'S INSIDE

- Migration assessment and risk analysis
- Strategy selection framework (4 patterns)
- Phase planning with weekly milestones
- Risk mitigation and rollback planning
- Success metrics and retrospective template

TechDebt.works

https://techdebt.works/

1 Assess Before You Migrate

Current State Analysis

* System/component being migrated: _____
* Current technology/version: _____
* Target technology/version: _____
* Number of dependent systems: _____
* Lines of code affected (estimate): _____
* Number of teams impacted: _____

Risk Assessment

* Data loss risk: [ ] Low [ ] Medium [ ] High
* Downtime risk: [ ] Low [ ] Medium [ ] High
* Rollback complexity: [ ] Simple [ ] Moderate [ ] Complex
* Team skill gap: [ ] None [ ] Minor [ ] Significant

2 Choose Your Strategy

Strategy 1: Big Bang Migration

When: Small systems, low risk, clear rollback

Duration: Days to weeks

Risk: High (all-or-nothing)

Strategy 2: Strangler Fig Pattern

When: Large monoliths, gradual replacement needed

Duration: Months to years

Risk: Low (incremental, reversible)

Strategy 3: Parallel Run

When: Critical systems, data integrity essential

Duration: Weeks to months

Risk: Medium (duplicate infrastructure cost)

Strategy 4: Branch by Abstraction

When: Internal components, clean interfaces possible

Duration: Weeks to months

Risk: Low-Medium (abstraction layer complexity)

Selected strategy: _____ (document rationale in ADR)

3 Plan Your Phases

Phase 1: Preparation (Weeks 1-2)

* Create Architecture Decision Record (ADR)
* Set up monitoring and rollback procedures
* Build feature flags for traffic routing
* Establish success metrics and thresholds

Phase 2: Proof of Concept (Weeks 3-4)

* Migrate one low-risk component end-to-end
* Validate data integrity and performance
* Document lessons learned and adjust plan

Phase 3: Incremental Migration (Weeks 5-12)

* Migrate components in priority order
* Run parallel systems with comparison checks
* Weekly go/no-go reviews with stakeholders

Phase 4: Cutover & Cleanup (Weeks 13-16)

* Route 100% traffic to new system
* Remove old system after soak period
* Update documentation and runbooks
* Conduct retrospective

4 Mitigate Risks

Rollback Plan

* Rollback trigger criteria: _____
* Rollback procedure: _____
* Maximum acceptable rollback time: _____
* Data reconciliation process: _____

Communication Plan

* Stakeholder update frequency: _____
* Escalation path: _____
* Customer impact notification: _____

5 Define Success

Metric	Before	Target	After
Latency (p99)	_____	_____	_____
Error rate	_____	_____	_____
Throughput	_____	_____	_____
Deployment frequency	_____	_____	_____
Developer productivity	_____	_____	_____
Operational cost	_____	_____	_____

6 Learn and Share

What went well?

What could have gone better?

What would we do differently?

Recommendations for next migration:

Full migration resources at https://techdebt.works/techniques/