LIVEWYER

# CLOUD PLATFORM ENGINEERING

**Technical Assessment Pilot** 

# **Executive Summary**

# The Background

Organisations face mounting pressure to deliver features faster while managing increasingly complex cloud infrastructure. Traditional approaches where development teams handle both application delivery and infrastructure operations create cognitive overload and operational bottlenecks. Teams struggle to balance speed with security, standardisation with flexibility, and innovation with stability.

Medium-sized enterprises find themselves caught between maintaining existing systems and adopting cloud-native practices that could unlock competitive advantages. The gap between understanding individual tools and developing a holistic platform engineering mindset prevents many organisations from realising the productivity gains and operational efficiency that cloud-native platforms promise. Without structured evaluation, teams risk implementing partial solutions that create more complexity rather than reducing it.

# The Opportunity

This pilot transforms this challenge into a manageable technical evaluation process. We provide a structured three-week assessment that demonstrates how platform engineering principles can address specific business pressures while building internal technical capability. Rather than theoretical consulting, this pilot delivers hands-on validation of platform approaches using representative applications and real technical constraints.

The pilot creates a foundation for informed decision-making by providing concrete evidence of operational complexity and transformation requirements. Through collaborative technical workshops and implementation, your team gains direct experience with cloud-native approaches while maintaining control over existing operations and strategic direction.

#### **Our Success Criteria**

Your specific pilot success criteria will be defined collaboratively in our initial meeting, based on the particular platform engineering challenges and your organisational transformation needs.

#### Example outcomes:

- → Strategic decision confidence: Provide comprehensive technical evidence enabling confident platform decisions, whether proceeding with cloud-native transformation, strengthening your foundations based on our recommendations, or pursuing alternative approaches based on practical demonstration rather than theoretical assessment.
- → Capability assessment validation: Document actual skills requirements, operational complexity, and transformation effort needed for broader platform adoption through hands-on evaluation, ensuring realistic planning for future investment decisions

# **Moving Forward**

The pilot positions your organisation to convert external technological pressure into strategic platform capability development. Through practical evaluation, you gain the technical confidence and evidence needed to make informed decisions about your infrastructure future while building internal expertise regardless of the chosen path.

# **Timeline**

This three-week pilot validates cloud-native platform engineering approaches through handson implementation and collaborative assessment. Each week builds upon the previous, moving from understanding your specific challenges to demonstrating practical solutions and providing evidence-based recommendations for strategic decisions.

#### **Timeline Overview**

Week 1:

Discovery and Platform Foundation

Implementation and Technical Validation

Week 3:

Assessment and Strategic Recommendations

# Week 1: Discovery and Platform Foundation

Understanding your business pressures and technical constraints shapes everything we build together. We establish collaborative working relationships with your technical teams while creating the foundation needed for meaningful platform evaluation.

# **Current State Assessment and Business Alignment**

We conduct a comprehensive review of your existing technical environment, focusing on application architectures, deployment patterns, and operational workflows. This session identifies specific pain points affecting team productivity, operational bottlenecks, and the business impact of current infrastructure approaches. We work with your team to understand which customers or opportunities you're losing today, what competitive advantages your competitors have, and where costs are escalating beyond sustainable levels.

#### **Assessment Coverage Areas**

Our assessment covers current infrastructure architecture, deployment workflows, resource utilisation patterns, and integration dependencies. We evaluate team capabilities for cloud-native approaches, document performance baselines, and identify operational procedures that could benefit from automation:

- ◆ Current infrastructure architecture and deployment workflow analysis
- Resource utilisation patterns and integration dependency mapping

Team capability evaluation for cloud-native approaches with skills gap identification

#### **Outcomes**

Clear understanding of your current technical landscape and transformation requirements:

- Current state technical assessment with documented pain points and opportunities
- Business impact analysis linking technical challenges to competitive positioning
- Team capability evaluation identifying skills gaps and strengths for platform adoption

# **Platform Architecture Workshop**

This collaborative technical session designs a reference architecture addressing your specific business and technical requirements. We map current operational pain points to potential platform engineering solutions, defining technical architecture, tooling requirements, and integration approaches for your pilot environment. Your team's expertise guides architecture decisions to ensure the platform approach fits organisational culture and operational patterns.

#### **Architecture Design Process**

Architecture decisions cover compute, storage, and networking components with emphasis on scalability, security, and operational complexity. We evaluate technology stack options, configuration management approaches, and technical trade-offs between different platform patterns:

- Technology stack evaluation and configuration management approaches
- Performance requirements analysis with disaster recovery considerations
- Integration workflow assessment to validate technical feasibility

#### **Outcomes**

Collaborative architecture design tailored to your specific requirements:

- Reference platform architecture designed for your specific requirements
- ◆ Technology stack selections confirmed through collaborative evaluation
- Integration approach documented with technical constraints identified

### **Development Environment Setup**

We establish the technical infrastructure needed for platform evaluation, deploying a cloudnative environment configured to mirror your production requirements. Basic platform tooling demonstrates core capabilities whilst development workflows enable upcoming implementation activities. Initial testing validates that the platform foundation meets technical specifications and operational access patterns.

#### **Environment Components**

Infrastructure deployment includes Kubernetes cluster setup, container registry configuration, and basic CI/CD pipeline establishment. Security configurations implement your organisational

policies whilst monitoring and logging capabilities provide operational visibility:

- Kubernetes cluster deployment with container registry configuration
- Security policy implementation aligned with organisational requirements
- Development access patterns and credential management setup

#### **Outcomes**

Working platform foundation ready for comprehensive evaluation:

- Working platform environment deployed and validated for evaluation activities
- Development workflows established enabling team collaboration on platform components
- Technical foundation confirmed ready for application deployment and testing

## Week 1 Achievements

Foundation establishment for comprehensive platform evaluation completed:

- ☑ **Business alignment**: Clear understanding of technical challenges affecting competitive positioning and operational efficiency
- ✓ **Technical architecture**: Collaborative design of platform approach addressing specific organisational requirements and constraints
- ☑ **Development readiness**: Working platform environment enabling meaningful evaluation of cloud-native patterns and operational workflows

# Week 2: Implementation and Technical Validation

Hands-on implementation demonstrates how platform engineering approaches address specific challenges identified during week one. We build working examples that validate technical assumptions while generating concrete evidence for strategic decision-making.

## Migration Planning and Risk Assessment

We collaborate on implementation approaches based on your specific technical constraints and operational requirements. Drawing from project experience, we create detailed migration plans that account for potential risks, rollback procedures, and operational dependencies. This planning session identifies complexities that might emerge during broader platform adoption and establishes procedures for managing changes safely.

#### **Planning Methodology**

Migration strategies address application dependencies, data persistence requirements, and service integration patterns. We develop rollback procedures for critical services, establish monitoring approaches for migration validation, and document operational runbooks for platform management:

◆ Application dependency mapping with service integration pattern analysis

- Rollback procedure development and monitoring approach establishment
- Risk mitigation strategy covering security implications and business continuity

#### **Outcomes**

Comprehensive migration strategy with tested procedures and risk mitigation:

- Detailed migration plan with step-by-step workflows and risk mitigation strategies
- Rollback procedures tested and documented for critical application components
- Operational complexity assessment identifying skills and resources needed for broader adoption

# **Platform Implementation with Representative Applications**

We deploy your representative applications using platform engineering best practices, focusing on solving specific pain points identified during week one. This implementation demonstrates self-service capabilities, automated deployment patterns, and operational workflows your teams would use daily. Working examples validate technical approaches against real-world requirements and operational constraints.

## Implementation Scope

Implementation covers containerisation strategies, service configuration management, and automated deployment pipelines tailored to your application patterns. We implement monitoring and logging approaches that provide operational visibility, establish security scanning and compliance validation, and configure scaling policies appropriate for your workload characteristics:

- Containerisation strategies with service configuration management approaches
- Security scanning and compliance validation with scaling policy configuration
- Integration testing to validate platform capabilities against existing system dependencies

#### **Outcomes**

Working platform demonstration providing measurable evidence of capabilities:

- Working platform demonstration addressing key business questions with measurable results
- Performance characteristics documented comparing platform efficiency with current approaches
- Operational workflow validation showing day-to-day team experience improvements

## **Comprehensive Testing and Validation**

Testing validates platform implementation against all use cases and requirements identified during week one. We document operational scenarios your development teams would encounter, validate assumptions about complexity and skills requirements, and gather performance data comparing platform approaches with current methods. This testing provides evidence needed for strategic recommendations.

#### **Testing Framework**

Testing includes performance benchmarking under realistic load conditions, disaster recovery validation, and security posture assessment. We evaluate scaling characteristics, resource utilisation efficiency, and operational maintenance requirements:

- Performance benchmarking with disaster recovery validation and security assessment
- Scaling characteristics evaluation with resource utilisation efficiency analysis
- Integration testing covering connectivity with existing systems and service dependencies

#### **Outcomes**

Complete technical validation providing comprehensive evidence base for decision-making:

- Complete technical validation with performance metrics and operational complexity analysis
- Evidence base establishing clear comparisons between platform and traditional approaches
- Risk assessment documenting challenges and requirements for successful broader implementation

## **Week 2 Achievements**

Technical validation through hands-on implementation provides concrete evidence for decision-making:

- ☑ Platform capability: Working demonstration proving technical feasibility and operational benefits
- ☑ Performance validation: Measured improvements in deployment speed, operational efficiency, and team productivity
- ✓ **Complexity assessment**: Realistic understanding of transformation effort, skills requirements, and organisational impact

# Week 3: Assessment and Strategic Recommendations

We complete pilot evaluation by addressing remaining technical questions, documenting findings comprehensively, and providing structured recommendations for strategic decisions. This week ensures all business-critical questions initially identified have clear, evidence-based answers.

#### **Assessment and Documentation**

Documentation consolidates all pilot findings into structured assessments tailored for different stakeholders. Executive summaries focus on business impact and strategic implications, technical documentation provides implementation details, and operational readiness assessments guide transformation planning. Evidence from technical demonstrations supports realistic recommendations about proceeding with platform transformation.

#### **Documentation Approach**

Assessment documentation addresses different stakeholder needs through targeted reporting formats. Executive summaries emphasise business impact and strategic positioning whilst technical assessments provide implementation roadmaps and complexity analysis:

- Executive summary focusing on business impact and strategic implications
- Technical assessment with implementation details and operational readiness evaluation
- Strategic options analysis covering implementation approaches and alternative pathways

#### **Outcomes**

Comprehensive pilot assessment enabling confident strategic decision-making:

- Complete pilot assessment with executive summary and detailed technical findings
- Evidence-based recommendations addressing all initial business questions and concerns
- Strategic options analysis covering full implementation, incremental adoption, or alternative approaches

## Stakeholder Communication

We present concrete results through live demonstrations showcasing platform capabilities, operational workflow improvements, and performance comparisons. Presentations address different stakeholder needs, from executive decision-making requirements to technical team operational concerns. Interactive demonstrations allow hands-on evaluation of platform user experience and operational complexity.

#### **Demonstration Approach**

Presentations combine live technical demonstrations with business impact analysis, ensuring stakeholders understand both operational benefits and strategic implications. Interactive elements allow direct evaluation of platform user experience:

- Live platform demonstrations with operational workflow showcases
- Business impact presentations tailored to executive decision-making needs
- Interactive sessions allowing hands-on platform experience evaluation

#### **Outcomes**

Clear stakeholder understanding and alignment on platform value proposition:

- Stakeholder alignment achieved through evidence-based presentation of platform capabilities and limitations
- Technical demonstrations validating platform approaches with realistic operational scenarios
- Clear understanding established of value proposition, implementation requirements, and strategic implications

#### Team Enablement

Structured review sessions evaluate pilot outcomes against initial business objectives, determining whether platform engineering addresses competitive challenges and operational pain points effectively. We discuss implementation sequencing, resource requirements, and risk mitigation strategies for broader transformation. All pilot assets, documentation, and technical knowledge transfer to your team regardless of strategic direction chosen.

# **Knowledge Transfer Approach**

Capability transfer ensures your team gains practical understanding of platform engineering concepts and operational workflows. Sessions combine strategic planning with hands-on technical knowledge transfer:

- Strategic planning sessions covering implementation sequencing and resource requirements
- Technical knowledge transfer with hands-on platform operational training
- Risk mitigation strategy development for broader transformation initiatives

#### **Outcomes**

Strategic framework and practical capabilities enabling confident next steps:

- Strategic recommendation framework with clear criteria for platform adoption decisions
- Implementation roadmap with prioritised next steps and realistic timeline estimates
- Complete knowledge transfer of pilot learnings, technical assets, and operational insights

#### **Final Assessment and Recommendations**

Pilot completion provides your leadership team with comprehensive evidence needed for confident strategic decisions about platform engineering adoption. Our assessment covers technical feasibility, organisational readiness, and business impact potential, enabling informed choices about transformation investment.

The evaluation establishes a clear decision framework based on practical demonstration rather than theoretical projections:

- ☑ Technical readiness assessment with validated complexity and skills requirements for successful platform adoption
- ✓ Strategic options analysis covering full transformation, incremental adoption approaches, or alternative technology investments
- ☑ Implementation roadmap with realistic timeline estimates and resource requirements based on hands-on pilot experience
- ☑ Support framework outlining transformation assistance options aligned with your chosen strategic direction

# Strategic opportunity and next steps

This pilot transforms the challenge of cloud-native complexity into a strategic opportunity for organisational capability development and competitive positioning. Rather than reacting to technological pressure, your team gains the technical confidence and evidence needed to make informed decisions about platform engineering that align with business objectives and operational realities. The collaborative evaluation process builds internal expertise in platform approaches while providing the decision-making foundation needed for strategic technology investments that create lasting competitive advantage.

The pilot establishes your organisation's capability to evaluate emerging technologies systematically, positioning your teams to navigate future technology decisions with confidence based on practical experience rather than vendor promises. Through hands-on validation of platform engineering principles, your infrastructure teams develop the technical leadership skills needed to guide organisational transformation while maintaining operational excellence and building developer satisfaction that supports long-term innovation capacity.