

Modernising Desktop Applications: Best Practices & Roadmap

A comprehensive guide to transforming legacy Windows applications into scalable, secure cloud environments





The Legacy Windows Application Challenge



Outdated Frameworks

Most enterprise desktop applications remain anchored to legacy Windows frameworks such as Win32 and .NET Framework, creating technical debt



Rising Costs

High maintenance expenses, security vulnerabilities, poor scalability, and limited cloud integration strain IT budgets



Security Risks

Legacy .NET monoliths slow innovation cycles and dramatically increase operational security exposure

Migration to modern environments like Azure Virtual Desktop (AVD) and Cloud PCs delivers the agility and security enterprises demand.

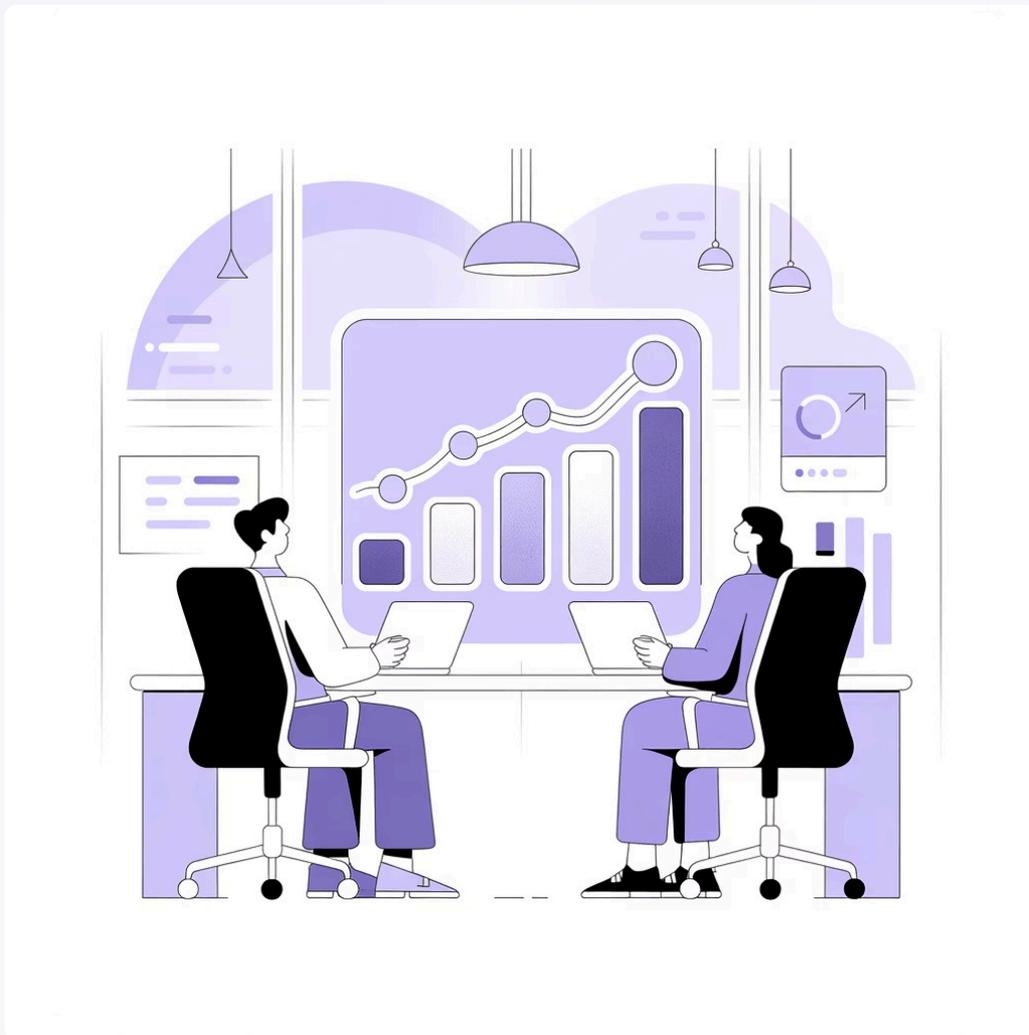
Why Modernise? The Business Imperative

The Challenge

Legacy applications actively hinder digital transformation initiatives and cloud adoption strategies, creating bottlenecks across the organisation.

The Opportunity

- Seamless cloud scalability with remote access capabilities
- Enhanced security through zero-trust architecture and compliance
- Improved user experience with modern UI/UX design
- Significant cost savings by reducing on-premises infrastructure



30%

TCO Reduction

IDC reports cloud desktop adoption can reduce total cost of ownership by up to 30%

Future-State Solution Scenarios

Strategic modernisation approaches for diverse application portfolios



Rehost ("Lift and Shift")

Move applications unchanged to Azure Virtual Desktop or Cloud PCs for immediate cloud benefits and quick wins



Refactor

Modify existing code to leverage cloud services, improve performance, and optimise resource utilisation



Rearchitect

Redesign application architecture for microservices, containerisation, or cloud-native SaaS models



Replace

Adopt new SaaS or cloud-native applications when legacy systems are beyond practical modernisation

- Hybrid approaches often combine these strategies across application portfolios, tailoring each solution to specific business needs.

Leading Vendor Tools & Platforms

Microsoft Azure Virtual Desktop & Windows 365 Cloud PC

- Native integration with Windows applications, identity management, and security frameworks
- Scalable, pay-as-you-go cloud desktop infrastructure
- Seamless Microsoft 365 ecosystem integration

VMware Horizon Cloud

- Multi-cloud support with advanced management capabilities
- Flexible deployment across hybrid environments

Citrix Virtual Apps and Desktops

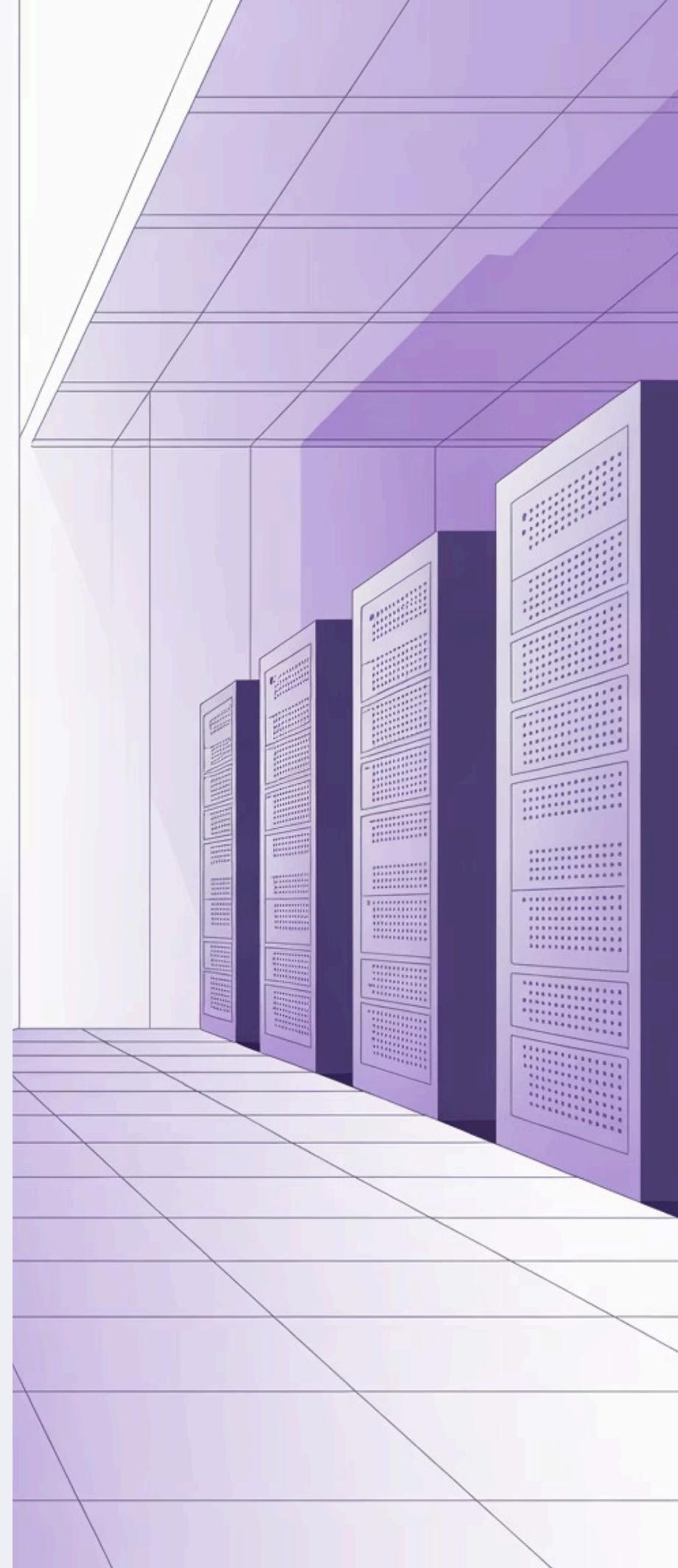
- Mature ecosystem with granular application delivery
- Enterprise-grade performance optimisation

Modernisation Accelerators

Microsoft's Application Insights provides code optimisations for .NET frameworks

IBM's AI-powered tools accelerate .NET modernisation journeys

Container platforms like Docker and Kubernetes enable application rearchitecting



ROI & Cost-Benefit Analysis Framework

Key Cost Factors

- **Legacy Burden**

Application maintenance, support overhead, and technical debt accumulation

- **Infrastructure Investment**

On-premises servers, hardware refresh cycles, and licensing expenses

- **Migration Costs**

Project implementation and modernisation transformation investments

Realised Benefits

- **Operational Excellence**

Reduced downtime, faster feature delivery, and improved agility

- **Cost Optimisation**

Lower infrastructure expenses and reduced licensing overhead

- **Risk Mitigation**

Enhanced security posture dramatically reduces breach risk costs

£1.2M

Annual Savings

A 500-seat AVD deployment can save £1.2M annually versus on-premises desktops, including hardware refresh cycles

Project Roadmap Template

Phase 1: Assessment & Planning

01

Application Inventory

Catalogue all desktop applications, dependencies, and integration points across the enterprise

02

Compatibility Assessment

Evaluate application compatibility with cloud environments and identify modernisation requirements

03

Stakeholder Engagement

Engage key stakeholders and define clear business objectives with measurable outcomes

04

Prioritisation Matrix

Prioritise applications by business value, user impact, and modernisation complexity

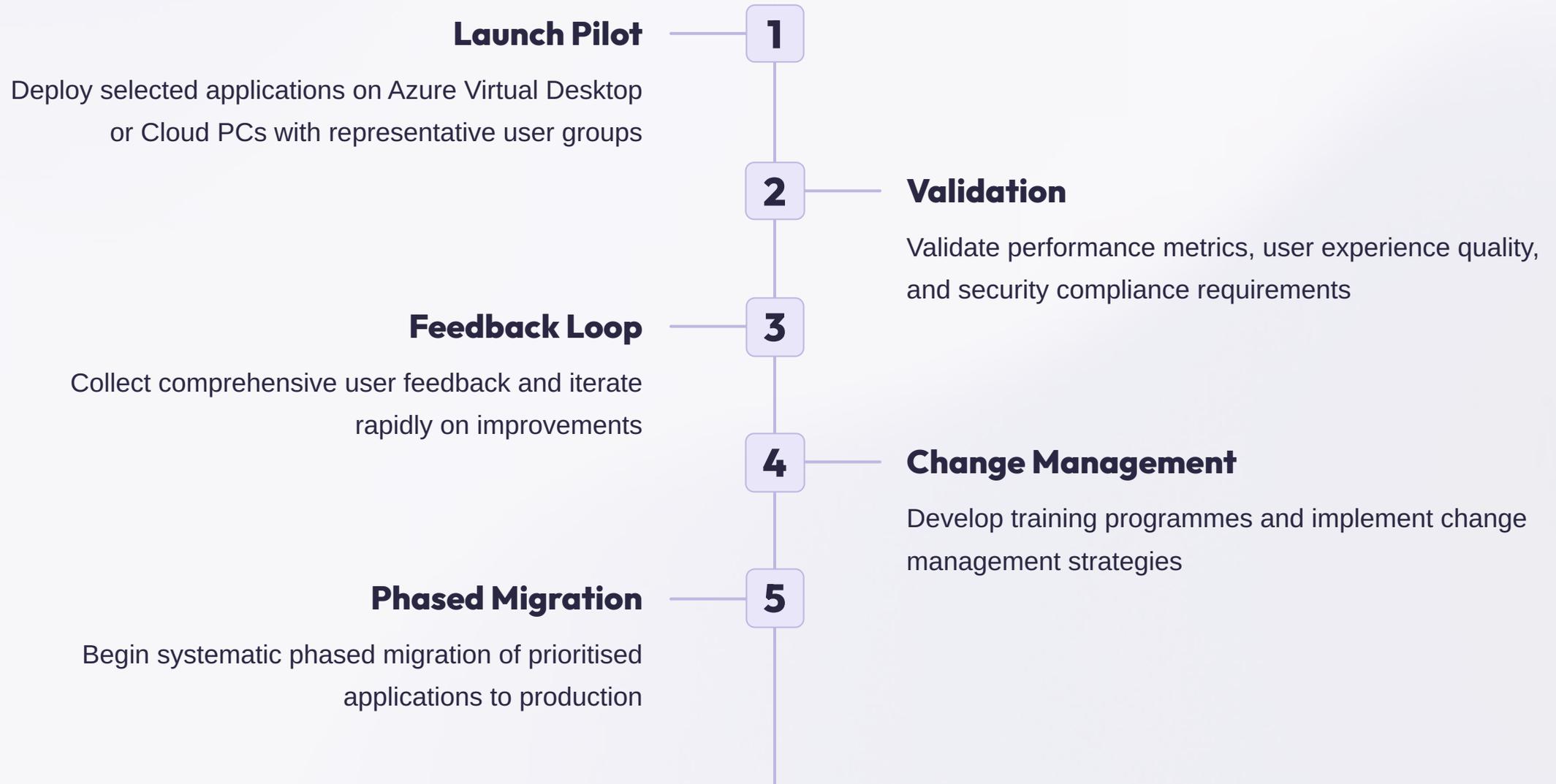
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Strategy Selection

Select optimal modernisation approach per application: rehost, refactor, rearchitect, or replace

Project Roadmap Template

Phase 2: Pilot & Migration



Project Roadmap Template

Phase 3: Optimisation & Continuous Improvement

Monitor Performance

Track application performance and user satisfaction using comprehensive telemetry tools

Governance Framework

Establish robust governance for cloud desktop environment management and compliance



Cost Optimisation

Optimise expenses through intelligent scaling and rightsizing of cloud resources

CI/CD Implementation

Implement continuous integration and deployment pipelines for ongoing application updates

Future Planning

Plan for future rearchitecting initiatives or replacement opportunities as technology evolves



Your Modernisation Journey Starts Now

The Challenge

Legacy desktop applications create barriers to innovation, growth, and competitive advantage in today's digital economy

The Solution

Modernising with Azure Virtual Desktop and Cloud PCs unlocks organisational agility, enhanced security, and substantial cost savings

The Roadmap

Use this comprehensive roadmap and best practices to plan a smooth, measurable transition with clear milestones

Embrace modernisation to empower your workforce, accelerate innovation, and future-proof your IT estate for the decade ahead.