

# Well Architected Review

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# Happiest Minds

Mar 2023



# AGENDA

- Well Architected Review Framework – Overview
- Happiest Minds Well Architected-Framework
- Challenges Addressed
- Key Pillars
- Tools & Digital Capital
- Execution Approach
- Execution Details

# Well Architected Framework & Review

## Overview

### WHAT

The Azure Well-Architected Framework is a great tool to help us design a holistic cloud solution. The framework is applicable for existing workloads that are planned to be migrated, modernized, or new workloads.

If there is an existing workload, it is recommended that the organizations start with the Azure Well-Architected Review, which is a continuous process

- Make the app highly scalable and responsive to customer needs.
- Identify potential technological risks within a cloud ecosystem, helping organizations address faults within an existing framework.

### WHY

### HOW

- Optimizing capacity as per your workload need
- Test workloads and applications at a production-scale before deploying them to production.
- Emphasis on architectures that is extendable & data driven
- Automate to drive continuous testing
- Schedule live-event simulations to help improve infrastructure

### BENEFITS

- Better management of budget
- Improved workloads security
- Increased incident response
- Streamlined internal processes
- Avoidance of costly mistakes
- Efficient performance

# Well Architected Review Framework

## Well Architected Review

### Explore

- Define scope of review
- Identify the workload
- Gather Information
- Conduct work shops
- Interview stake holders
- Review 5 pillars
  - Operational Excellence
  - Security
  - Reliability
  - Performance Efficiency
  - Cost Optimization

### Envision

- Evaluate the workloads against the best practices outlined in the framework.
- Identify any areas of improvement / Remediation
- Develop a remediation plan to address the identified issues and opportunities.
- Present remediation report, implement duration , cost and ROI

### Remediate

#### Engineer

- Develop a remediation plan: Develop a remediation plan to address the findings and prioritize the implementation of the recommendations.
- Prioritize remediations with timeline and effort
- Execute recommended remediations
- Share ROI of remediations

### Monitor

#### Enhance

- New workload deployment
- New workload migration
- New feature development and deployment
- Continuously monitor the Azure infrastructure to ensure that it remains in compliance with the Azure Well-Architected Framework and reassess the architecture periodically

Leveraging Mindful Thinking 4E Framework

# Well Architected Review

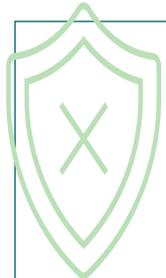
## Challenges Addressed



**Poor performance:** If the workload is not optimized properly, it may result in slow response times or low throughput. This can negatively impact user experience and overall productivity



**High cost:** Organizations may overspend on Azure resources, such as virtual machines or storage, leading to higher costs than necessary. This may happen due to overprovisioning, not utilizing discounts, or leaving unused resources running.



**Security vulnerabilities:** Workloads may not be secure enough, leaving them vulnerable to potential cyberattacks, data breaches, or unauthorized access.



**Lack of scalability:** Workloads that are not designed for scalability may face issues when the workload increases, leading to service outages or performance degradation.



**Compliance issues:** Organizations that need to comply with specific regulations, such as HIPAA or GDPR, may face compliance issues if their workload is not configured properly to meet those regulations.

# Well Architected Review

## Key Pillars



### Reliability

- ✓ Test with simulations and forced failovers
- ✓ Deploy consistently
- ✓ Monitor health
- ✓ Respond to failure and disaster
- ✓ Identify System recovery from infrastructure or service failures



### Security

- ✓ Identity and access management
- ✓ Infra protection
- ✓ App security
- ✓ Data encryption and sovereignty
- ✓ Security operations
- ✓ Risk assessments and mitigation strategies.



### Cost Optimization

- ✓ Cost and usage monitoring
- ✓ Azure Hybrid Benefit
- ✓ Reserve Instances
- ✓ Shutdown and resize resources
- ✓ Move to PAAS
- ✓ Avoid unneeded cost
- ✓ Eliminate suboptimal resources
- ✓ Budget reductions due to lack of support for cloud adoption



### Operational Excellence

- ✓ DevOps
- ✓ Deployments
- ✓ Monitor processes and cadence
- ✓ Communication mechanisms and dashboards
- ✓ Unclear expectations and business outcomes
- ✓ Visibility on root cause for events



### Performance Efficiency

- ✓ Design for scaling
- ✓ Monitor new services deployments
- ✓ Guidance for technology and architecture selection
- ✓ Architecture design trade offs to achieve business goals

# Well Architected Review

## Tools & Digital Capital

Tools	Description
Azure Well-Architected Review tool	Provides a questionnaire-based approach to evaluating workloads against the best practices outlined in the Azure Well-Architected Framework. It generates a report that highlights the strengths and weaknesses of the workload and provides recommendations for improvement.
Azure Advisor	Provides recommendations for optimizing Azure resources based on Azure best practices. It can help identify opportunities for cost savings, security improvements, and performance optimizations.
Azure Security Center	Provides a centralized view of the security posture of Azure resources. It can identify security vulnerabilities, provide recommendations for improvement, and help ensure compliance with security standards
Azure Monitor	Provides insights into the performance and health of Azure resources. It can help identify performance bottlenecks, troubleshoot issues, and optimize resource usage.
Azure Cost Management & Billing	Provides visibility into the costs of Azure resources and helps identify opportunities for cost optimization. It can help optimize spending, budget management, and cost allocation.

Enabled by Skills, Partnership, IP Assets and Frameworks

**Mindful 4E Digital Transformation Framework**

# Well Architected Review

## Execution Approach



### Identify

- Identify the scope of the review and identify the workloads to be evaluated.
- Identify & map the resources and the stakeholders involved.



### Detail

- Detail the workloads for architecture, design, and deployment
- Capture the network topology, storage, compute, security, and application design.



### Evaluate

- Map and evaluate the current workloads against WAR Pillars & best practices
- Identify any areas of improvement and develop a plan to address them



### Derive

- Strengths and weaknesses of the workload,
- Recommendations for improvement,
- Prioritized action plan.

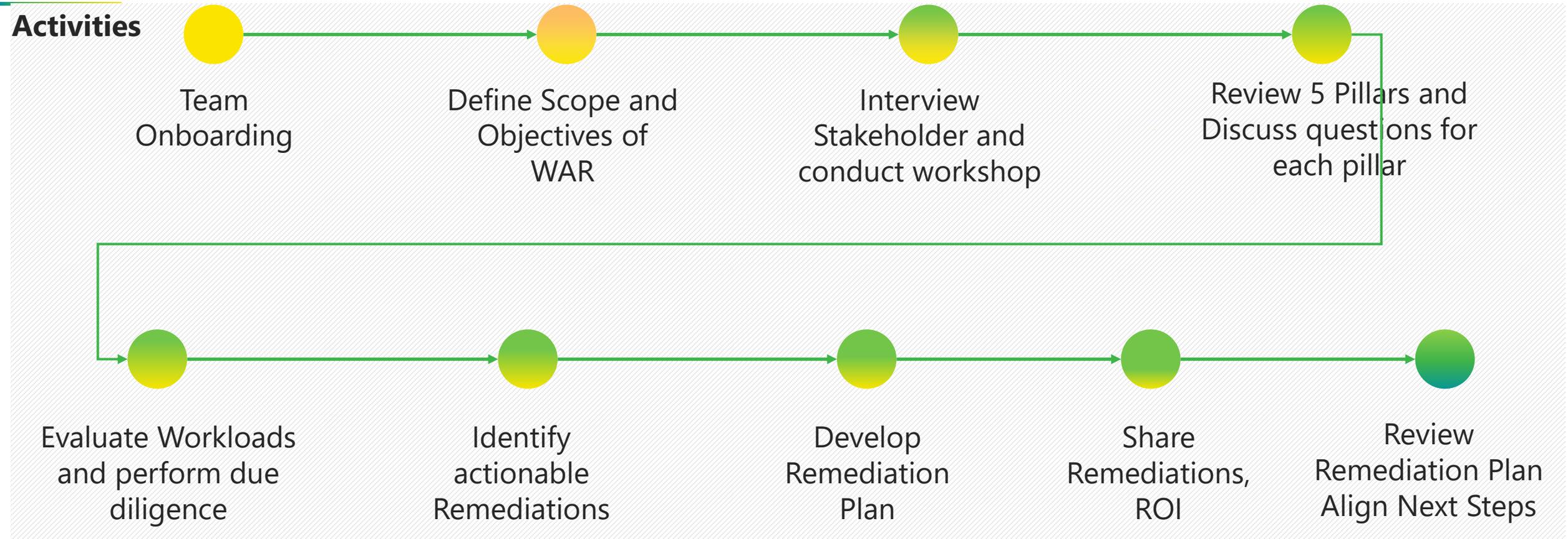


### Publish

- Publish to the stakeholders involved,
- Discuss the findings and recommendations
- Next steps for improving the workload.

# Well Architected Review

## Execution Details



### Duration

15 days

### Core Team

Solution Architect  
Security Architect  
Infrastructure Engineer

### Deliverables

WAR Report  
Remediation Report  
Remediation Implementation Plan

