



# Are you Well-Architected?

## AWS Well-Architected Framework

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WWPS Solutions Architect

# Why are we here?



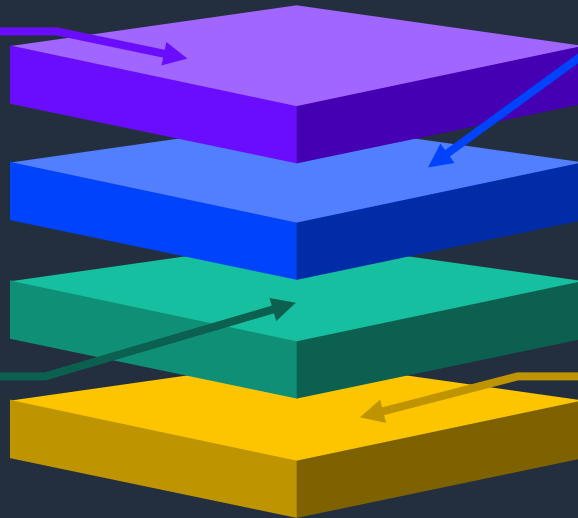
## EXPERTISE

To ensure your team builds internal expertise on the Well-Architected Framework



## SCALE

To scale the competency needed to scale Well-Architected adoption



## TRAINING



To teach you about the Well-Architected Framework

## ENABLEMENT



To build the internal team knowledge for your team use the Well-Architected Framework

*... to build the foundation for your teams to use Well-Architected*

# Today's agenda



1

Why do we need the AWS Well-Architected Framework?



2

What is a Well-Architected Review?



3

What is available under the Well-Architected Framework?

# Why do we need the AWS Well-Architected Framework?

# Why AWS Well-Architected Framework?



Build and deploy faster

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Lower or mitigate risks

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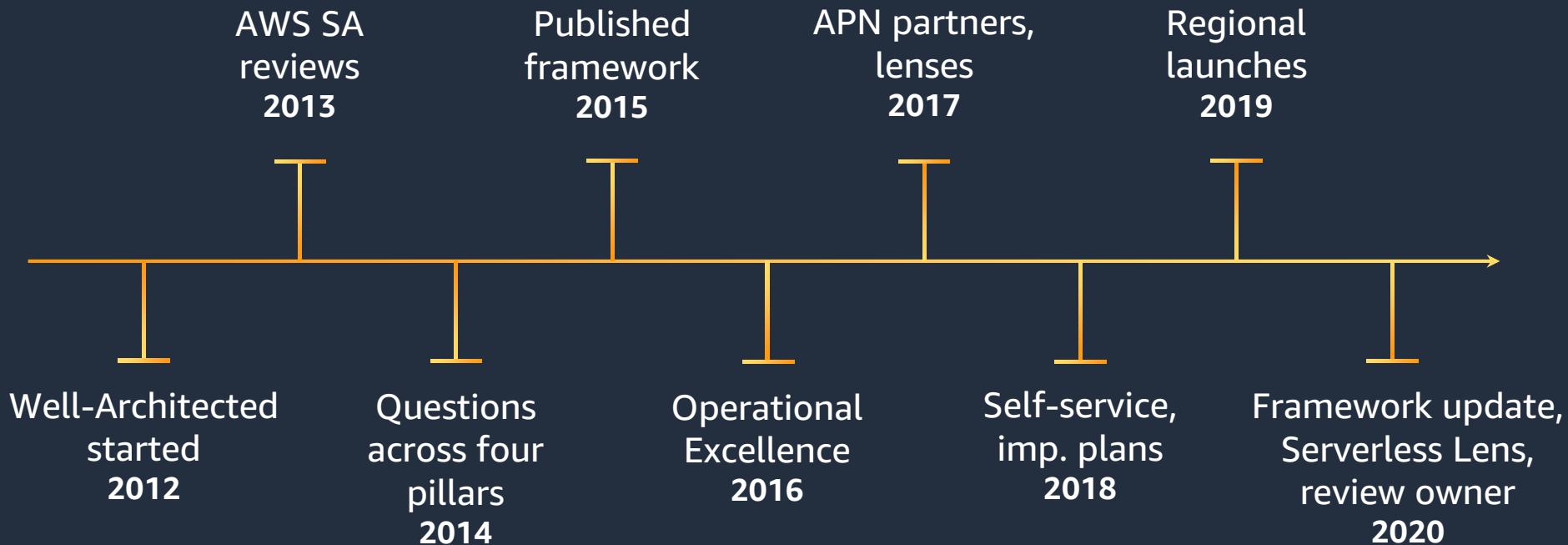
Make informed decisions

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Learn AWS best practices

# A brief history of Well-Architected



Section 2:

## What is a Well-Architected Review?

When you look at the workloads your team is building, can you answer the question:

***“Are you Well-Architected?”***

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# Pillars of AWS Well-Architected



Operational  
Excellence



Security



Reliability



Performance  
Efficiency



Cost  
Optimization

# General design principles

- ⌘ Stop guessing your capacity needs

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- ⌘ Test systems at production scale

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- ⌘ Automate to make architectural experimentation easier

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- ⌘ Allow for evolutionary architectures

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- ⌘ Drive architectures using data

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- ⌘ Improve through game days

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# Intent of review

Not an audit



Working together  
to improve

Not architecture  
astronauts



Pragmatic,  
proven advice

Not a one-time  
check



Throughout  
lifecycle

# Learnings

Pre-launch only?



Earlier  
is better

Make bad decisions?



Not considered  
decisions

Findings?



Most workloads  
can be improved

# Use cases



Learning best  
practices for the cloud



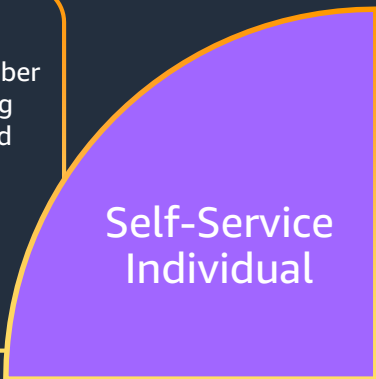
Technology  
governance



Portfolio  
management

# Review Format Options

- Done by individual team member
- Good for first review / learning
- Should be marked as non-prod
- Can be done iteratively
- Good for planning
- Use the W-A Tool



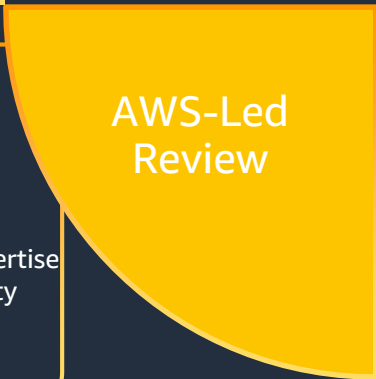
Self-Service  
Individual



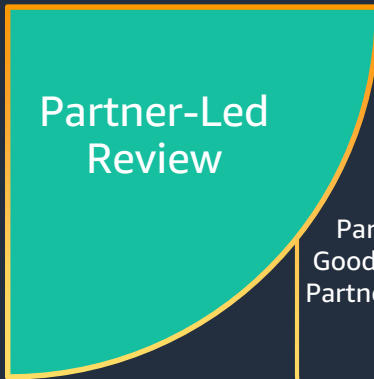
Self-Service  
as a Team

- Done with cross-functional team
- Good to prepare for AWS/Partner
- Requires time commitment
- Can be done iteratively
- Good for team learning
- Use the W-A Tool

- Use the W-A Tool
- Share the results
- Best for critical workloads
- Good for deeper insight / expertise
- More limited overall availability



AWS-Led  
Review



Partner-Led  
Review

- Use the W-A Tool
- Share the results
- Partner credits for resolving HRIs
- Good for deeper insight / expertise
- Partners can give hands-on support

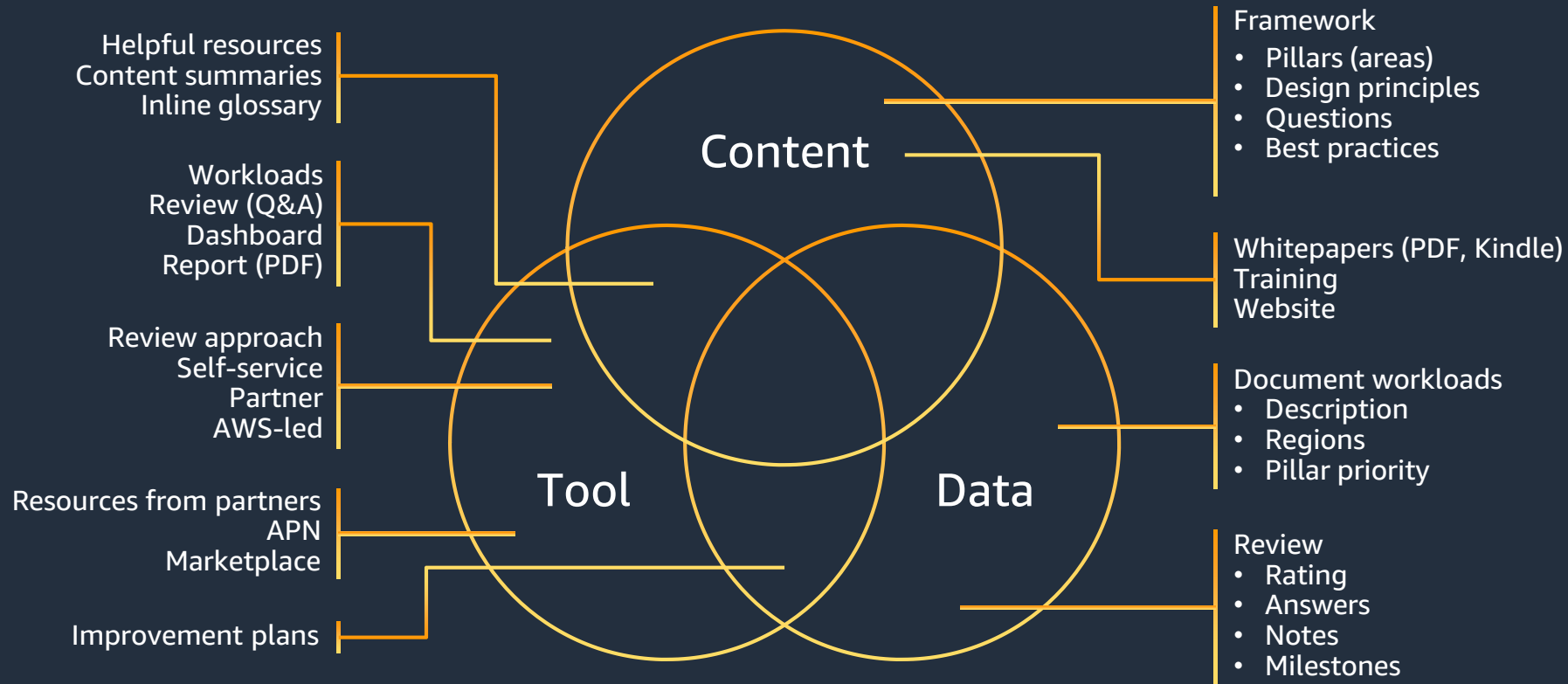
# The Well-Architected Process



Section 3:

# What is available under the Well-Architected Framework?

# What is Available?



# Well-Architected content website

<https://wa.aws.amazon.com/>



AWS Well-Architected Framework



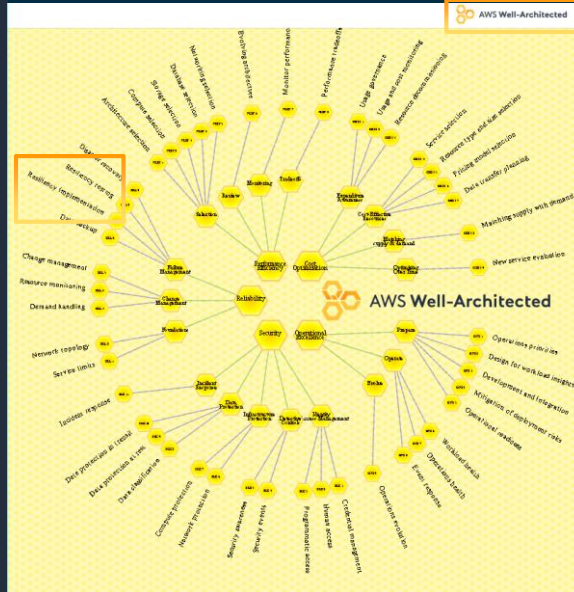
## AWS Well-Architected Framework

### Abstract

This document describes the AWS Well-Architected Framework, which enables you to review and improve your cloud-based architectures and better understand the business impact of your design decisions. We address general design principles as well as specific best practices and guidance in five conceptual areas that we define as the *pillars* of the Well-Architected Framework.

### Contents

- Introduction
- Definitions
- On Architecture
- General Design Principles
- The Five Pillars of the Framework
- Operational Excellence
- Security



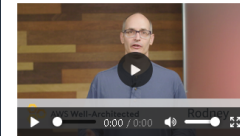
AWS Well-Architected Framework

> The Five Pillars of the Framework



> Reliability > How does your system withstand component failures?

**REL 7: How does your system withstand component failures?**  
*If your workloads have a requirement, implicit or explicit, for high availability and low mean time to recovery (MTTR), architect your workloads for resilience and distribute your workloads to withstand outages.*



### Resources

- [Performing chaos at Netflix scale](#)
- [AWS global infrastructure](#)
- [Global tables](#)
- [Multiple data center HA network connectivity](#)
- [AWS Marketplace: products that can be used for fault tolerance](#)
- [APN Partner: partners that can help with automation of your](#)

# Well-Architected Labs

<https://wellarchitectedlabs.com/>



AWS  
Well-Architected Labs

Operational Excellence

Security

Reliability

Performance Efficiency

Cost

Well-Architected Tool

Amazon Free Tier

## Introduction

The [Well-Architected](#) framework has been developed to help cloud architects build the most secure, high-performing, resilient, and efficient infrastructure possible for their applications. This framework provides a consistent approach for customers and partners to evaluate architectures, and provides guidance to help implement designs that will scale with your application needs over time.

This repository contains documentation and code in the format of hands-on labs to help you learn, measure, and build using architectural best practices. The labs are categorized into levels, where 100 is introductory, 200/300 is intermediate and 400 is advanced.

## Prerequisites:

An [AWS account](#) that you are able to use for testing, that is not used for production or other purposes.

NOTE: You will be billed for any applicable AWS resources used if you complete this lab that are not covered in the [AWS Free Tier](#).

## Labs:

The labs are structured around the five pillars of the [Well-Architected Framework](#):

- [Operational Excellence](#)
- [Security](#)

# AWS Solutions Library

<https://aws.amazon.com/solutions/>



AWS Solutions

**Library**

Constructs ▾

Implementations

Consulting Offers

## AWS Solutions Library

Vetted Technology Solutions for the AWS Cloud

### Explore the AWS Solutions Library

The AWS Solutions Library offers a collection of cloud-based solutions for dozens of technical and business problems, vetted for you by AWS. You can use patterns from AWS Solutions Constructs if you want to build your own well-architected application, browse our collection of AWS Solutions Implementations if you want to deploy a reference implementation yourself, or choose an AWS Solutions Consulting Offer if you want help from an AWS Competency Partner with deploying, integrating, and managing a Solution.

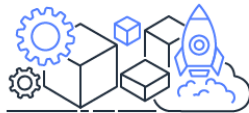
#### AWS Solutions Constructs



I want to combine pre-built, well-architected multi-service patterns to create my own solutions

[Explore AWS Solutions Constructs »](#)

#### AWS Solutions Implementations



I want to deploy vetted architecture directly into my AWS account

[Explore AWS Solutions Implementations »](#)

#### AWS Solutions Consulting Offers



I want help deploying vetted architecture from AWS Competency Partners

[Explore AWS Solutions Consulting Offers »](#)

# Questions?