

Building Intelligent Apps: Team Readiness Toolkit

Empower your teams to acquire new skills for building and modernizing intelligent apps

Contents

Move your intelligent app strategy forward	3
Chapter 1 Build and modernize with confidence	4
Chapter 2 Assess team readiness and plan for success	5
Chapter 3 Deploy using best practices	7
Chapter 4 Manage and optimize workloads	9
Conclusion Embrace a culture of continuous learning	10

Move your intelligent app strategy forward

Today, developers must push their skill sets' boundaries to build intelligent apps using Al and advanced technologies. Trusted by organizations worldwide, Azure empowers developers to build new apps—and modernize existing ones—by offering skilling resources that meet them at their current level of expertise.

What is an intelligent app?

An intelligent app integrates AI and/or machine learning to make interactions more dynamic and human-like. You can create an intelligent app by building it natively in the cloud or by migrating and modernizing an existing app and infusing it with AI or machine learning capabilities. Whichever approach you take, cloud technology is essential to making the development process fast, scalable, and secure.

Azure solutions for building and modernizing intelligent apps

- > Azure Kubernetes Service > Azure Cosmos DB > Azure DB for PostgreSQL
- > Azure App Service > Azure SQL DB > Azure Al services

This toolkit is designed to help developers and IT leaders...

- > Use Al-powered tools and services to quickly bring differentiated solutions and digital experiences to market.
- > Establish a cloud foundation that supports high performance and scalability for intelligent apps.
- > Empower teams of all skill levels to build quickly using services that support nearly every data type and environment.

Build and modernize with confidence

Foster team confidence by equipping developers with the resources to overcome the most common barriers to building with AI.

Barriers to developing with Al	Solutions
Limited experience working with Al	Reinforce your skills using in-depth and hands-on learning materials.
Wide diversity and complexity of AI technologies and tools	Partner with expert support and use Al-powered tools and fully managed cloud-native services to simplify complex workflows.
Uncertainty surrounding the ethical use of Al	Follow a responsible AI framework to ensure ethical, fair, transparent, and trustworthy practices.

Assess team readiness and plan for success

Kickstart your app innovation strategy by exploring the fundamentals of creating intelligent apps with Al. Assess your team's readiness to modernize apps and data, equip developers with new tools, and establish a responsible framework for using Al.

Al fundamentals: Resources for IT leaders

Topic	Description	Resource
Team readiness	Assess your team's readiness to modernize app and data workloads.	Take the assessment
Team productivity	Learn how to onboard new developers quickly and supercharge their productivity using Visual Studio, Visual Studio Code, and GitHub Copilot.	Watch the video
Responsible Al	Get the latest updates on responsible Al policies, research, and engineering.	Browse resources
Al accessibility	Learn how to empower everyone in your organization to use AI.	Take the learning path

Al fundamentals: Resources for developers

Topic	Description	Resource
Al fundamentals	Learn the foundational concepts of AI including computer vision, natural language processing, and conversational AI.	Take the challenge
Generative Al fundamentals	Explore large language models, how to generate Al copilots, and the essentials of creating prompts.	Take the learning path
Build cloud-native apps	Learn how to choose the right service for your apps and how to build and scale intelligent apps using Azure Kubernetes Service and Azure Container Apps.	Watch the video
Modernize existing apps	Learn how to migrate on-premises .NET and Java apps to the cloud using GitHub and DevOps.	Watch the video
GitHub Copilot	Get step-by-step instructions for enabling GitHub Copilot for Business.	Take the learning path



Our developers type in what they want to achieve and GitHub Copilot offers solutions without switching contexts. They receive immediate answers, saving countless hours."

Salih Eligüze, Head of DevOps, Intertech

Deploy using best practices

Enhance your team's ability to deploy intelligent apps quickly and efficiently. Use these resources to guide you through using containers, microservices, and DevOps to build, test, and deliver your app at a competitive pace—without sacrificing performance.

Intelligent app deployment: Resources for developers

Topic	Description	Resource
Azure OpenAl Service	Follow step-by-step instructions to create and deploy an Azure OpenAl resource.	Read the documentation
Azure Container Apps	Learn how to build and deploy intelligent apps with Azure Container Apps and set up an Azure environment.	Take the tutorial
OpenAl	Learn how to deploy an intelligent microservice-based app with Azure Kubernetes Service (AKS) and Azure Open Al Service.	Watch the video
Azure DevOps	Discover how to configure pipelines and run automated tests.	Take the learning path
Al-enabled apps solution accelerators	Discover how to configure pipelines and run automated tests.	Read the documentation

Intelligent app deployment: Resources for IT leaders

Topic	Description	Resource
Deployment environments	Learn how to deploy the right environment quickly and securely with Azure Deployment Environments.	Watch the video
Deployment best practices	Explore the three main concepts of deploying intelligent apps: deployment sources, building pipelines, and deployment mechanisms.	Read the article



With AKS prebuilt templates and built-in code, developers are self-sufficient, engaged, and empowered. And there's no waiting on deployment time. Now it's just a matter of hours to get something into production—not days, weeks, or even months like before."

Cofounder, Al¹

¹The Total Economic Impact of Microsoft Azure App Innovation, a commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2023

Manage and optimize workloads

Equip your team with the skills to drive ongoing improvements and innovation. Learn how to monitor, troubleshoot, and improve the cost efficiency of your intelligent apps using a comprehensive suite of tools.

Intelligent app management and optimization: Resources for IT leaders

Topic	Description	Resource
Evaluating workloads	Assess your team's readiness to modernize app and data workloads.	Take the assessment
Optimizing workloads	Learn how to onboard new developers quickly and supercharge their productivity using Visual Studio, Visual Studio Code, and GitHub Copilot.	Take the learning module
Key architecture principles	Get the latest updates on responsible Al policies, research, and engineering.	Take the learning path

Intelligent app management and optimization: Resources for developers

Topic	Description	Resource
App scalability	Ensure your intelligent apps can handle fluctuating workloads without compromising performance.	Read the article
App security	Monitor apps and protect them against cyber threats with Azure Al Anomaly Detector and Azure Kubernetes Service.	Read the article
App performance	Learn how to improve the accuracy and relevancy of responses using Azure OpenAl.	Take the learning module

Microsoft ISV partner spotlight: NVIDIA AI on Azure

Build next-gen AI services with the world's most advanced AI platform. Watch now

Embrace a culture of continuous learning

Wherever you are in your AI journey, support ongoing developer learning with hands-on resources that build on their current knowledge and expertise. Whether you're innovating cloud-native apps or migrating and modernizing existing apps, helping your team acquire and practice new skills is key to creating apps that delight customers, maximize ROI, and drive productivity.



Set your people and organization up to succeed by investing in a learning culture. Set the tone for the future, be transparent and show how new technologies such as AI, for example, can augment human intelligence for the better."

Forbes

²Swash, J. (n.d.). Council Post: Why A Learning Culture Is An Important Aspect
Of The Business Of Tomorrow, Forbes, September 2023

The resources contained in this toolkit are just a small portion of what's available for ongoing skilling. Microsoft offers a wide range of resources to support your team's continuous learning as you activate your intelligent app strategy with Azure solutions. Browse Microsoft learning resources >

Take the next steps to intelligent app innovation

<u>Contact Sales</u> > <u>Start a free trial with Azure</u> >

© 2024 Microsoft Corporation. All rights reserved. This document is provided "as-is." Information and views expressed in this document, including URL and other internet website references, may change without notice. You bear the risk of using it. This document does not provide you with any legal rights to any intellectual property in any Microsoft product. You may copy and use this document for your internal, reference purposes.