

Navigating the Role of Software Architecture in the AI Era Amid Economic Volatility

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AGENDA –

1. Current Software Architecture practice
2. How Generative AI is impacting Software Architecture
3. Current Job Market Situation (2023-2024)
4. Jobs Impacted & Layoffs Trends
5. Generative AI on the Workforce
6. Future-Proofing Your Career

What is a Solution Architect?



A Solution Architect is...

- 1 Functional expert
- 2 Technical expert
- 3 Go-to knowledgeable resource
- 4 Problem solver
- 5 Owner of the solution and its design

Existing Product and Platform Skills

- 1 Microsoft Power Platform
- 2 Microsoft Dataverse
- 3 Dynamics 365
- 4 Microsoft Azure
- 5 Azure DevOps

Essential Solution Architect Soft Skills

Collaboration

Coordination

Communication

**Constructive
feedback**

Problem solving

Delegation

How Generative AI is Impacting Software Architecture

**Automating Code
Generation**

**Enhancing
Software Design**

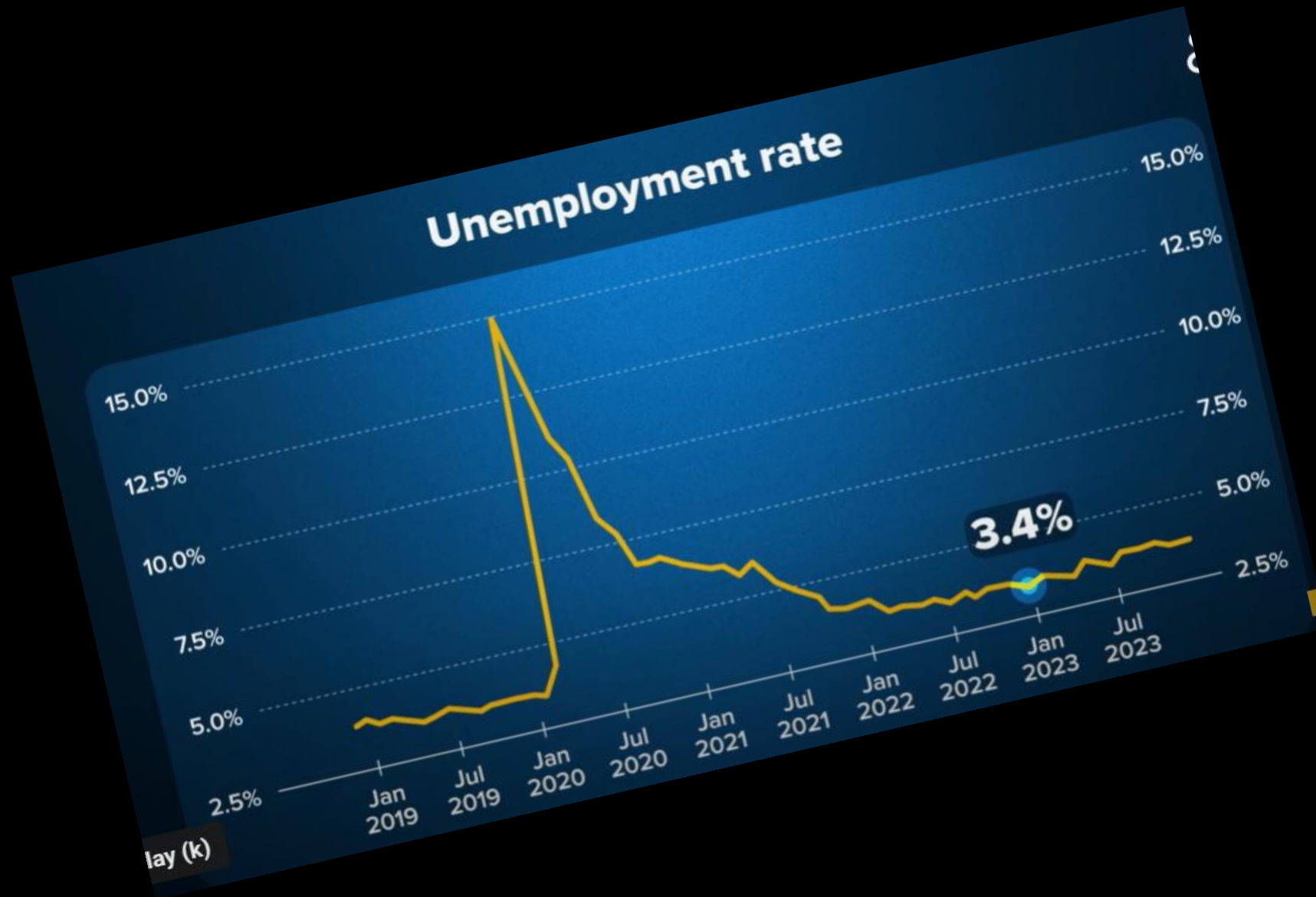
**Predictive
Maintenance**

AI-driven Testing

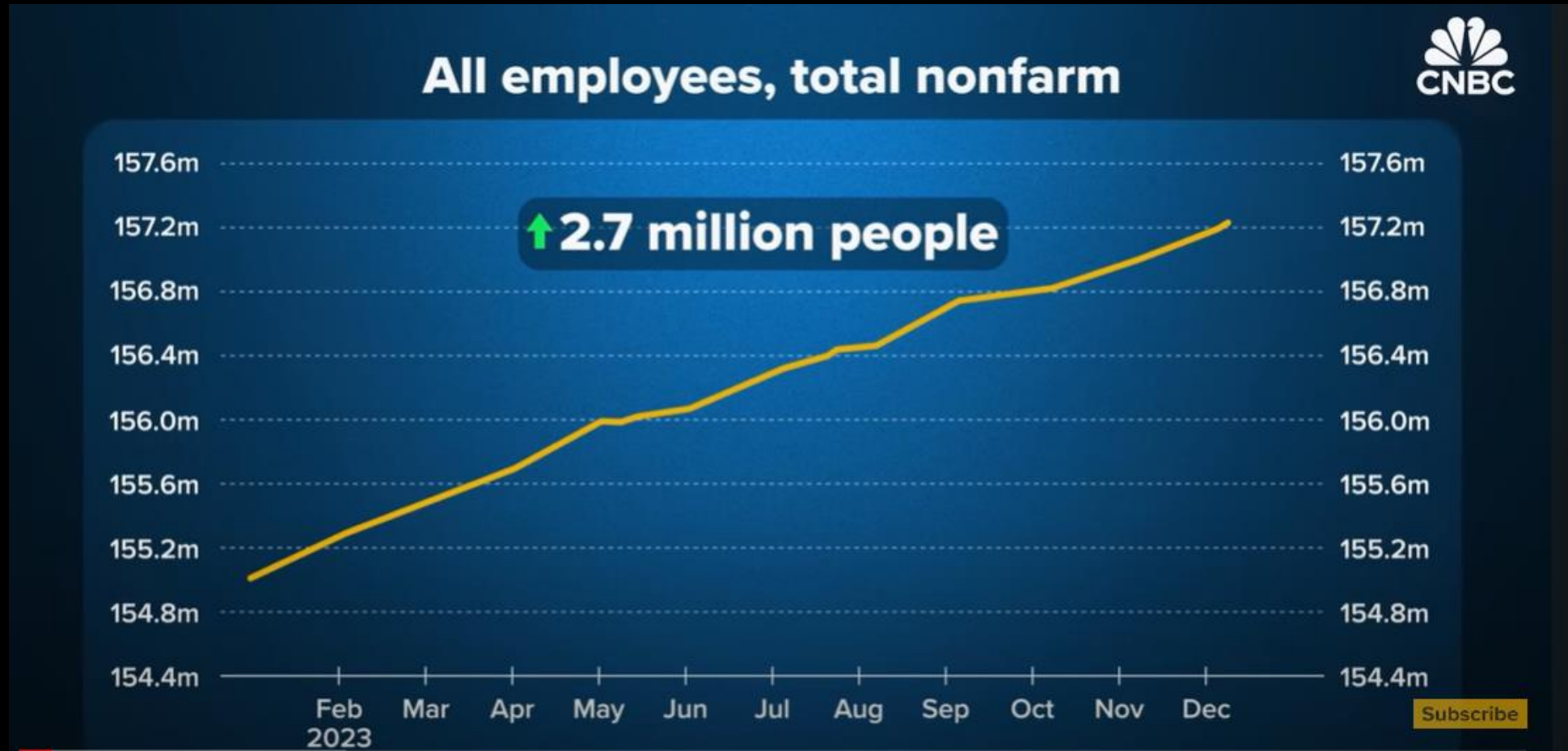
**Architecture
Optimization**

**Natural Language
Processing (NLP)
Integration**

Current Job Market Situation (2023-2024)



Current Job Market Situation (2023-2024)



Current Job Market Situation (2023-2024)



By Jeff Cox • February 2, 2024

U.S. economy added 353,000 jobs in January, much better than expected



Why it feels so hard to get a job right now

Jobs Impacted

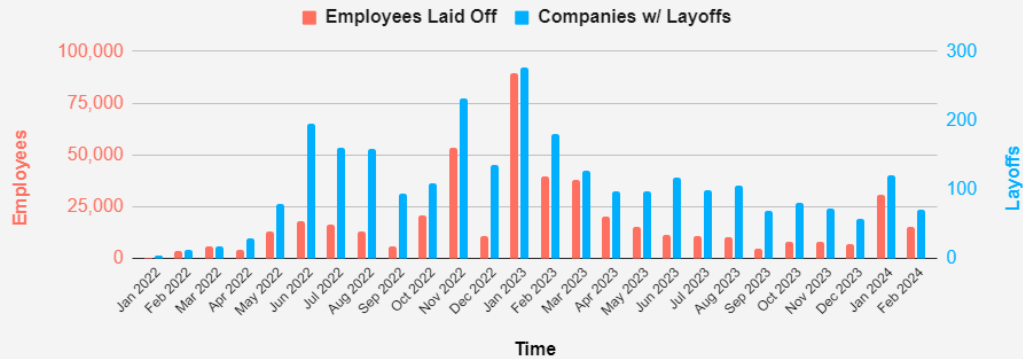
1. Administrative
2. Coding
3. Customer service
4. Legal
5. Teachers
6. Legal
7. Finance
8. Engineering
9. Human Resources



Layoffs Trend

Tech layoffs in 2022-2024

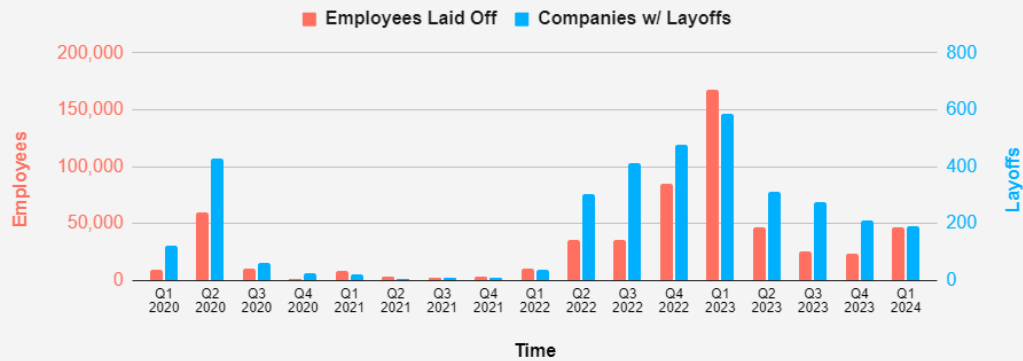
Source: <https://layoffs.fyi>



URL: <https://layoffs.fyi/>

Tech layoffs since COVID-19

Source: <https://layoffs.fyi>



Tech layoffs by industry

Source: <https://layoffs.fyi>

2024 2023 2022

Layoffs Trend 23/24

Many cuts (updated Aug 24)

- Microsoft – 17k cuts in FY23+ 1500 June 2024
- Google – 12K Cuts in FY23 + 2K June 2024
- Amazon - 14K Cuts in FY23 + 2k June 2024
- Reliance Industries – 42K in FY2024
- Intel – 15K in FY24
- Citibank – 20K (by 2026)
- Cisco – 4,250
- Nike – 2% of its global work force
- Swiggy – 400 jobs
- SpiceJet – 1,400
- Paramount – 800
- Snapchat – 500
- Grammarly – 230
- Paypal – 2,500
- Pixar – 300 and manu etc

Why?

1. COVID-19
2. Tech Companies hired more with zero Interest rate
3. Recession / inflation
4. FED Interest rate increased
5. Companies need to lean & with AI focus



Copilot in Power Apps

The screenshot displays the Power Apps web interface. The top navigation bar includes the 'Power Apps' logo, a search bar, and environment information ('Environment: Contoso Project - 23'). A left-hand sidebar lists navigation options: Home, Create, Learn, Apps, Tables, Flows, Solutions, and More. The main content area features a large banner with the heading 'Let's build an app. What should it do?'. Below this heading are four buttons: 'Collect RSVPs', 'Track sales leads', 'List inventory', and 'Manage inspections'. A text input field prompts the user to 'Use everyday words to describe what your app should collect, track, list, or manage ...'. A toggle switch on the right allows users to 'Try the new Power Apps'. Below the banner, a section titled 'Other ways to create an app' offers three starting points: 'Start with data', 'Start with a page design', and 'Start with an app template'. At the bottom, a 'Your apps' section contains a table listing existing applications.

Power Apps

Search

Environment: Contoso Project - 23

This is a developer environment and not meant for production use. [Learn more](#)

Try the new Power Apps

Let's build an app. What should it do?

Collect RSVPs Track sales leads List inventory Manage inspections

Use everyday words to describe what your app should collect, track, list, or manage ...

This AI-powered feature is in preview. [See terms](#)

Other ways to create an app

In this environment: 3 users (CQ, KK, MA)

Start with data

Create a table, pick an existing one, or even import from Excel to create an app.

Start with a page design

Select from a list of different designs and layouts to get your app going.

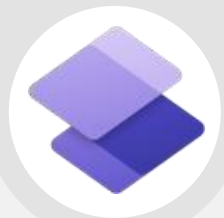
Start with an app template

Select from a list of fully-functional business app templates. Use as-is or customize to suit your needs.

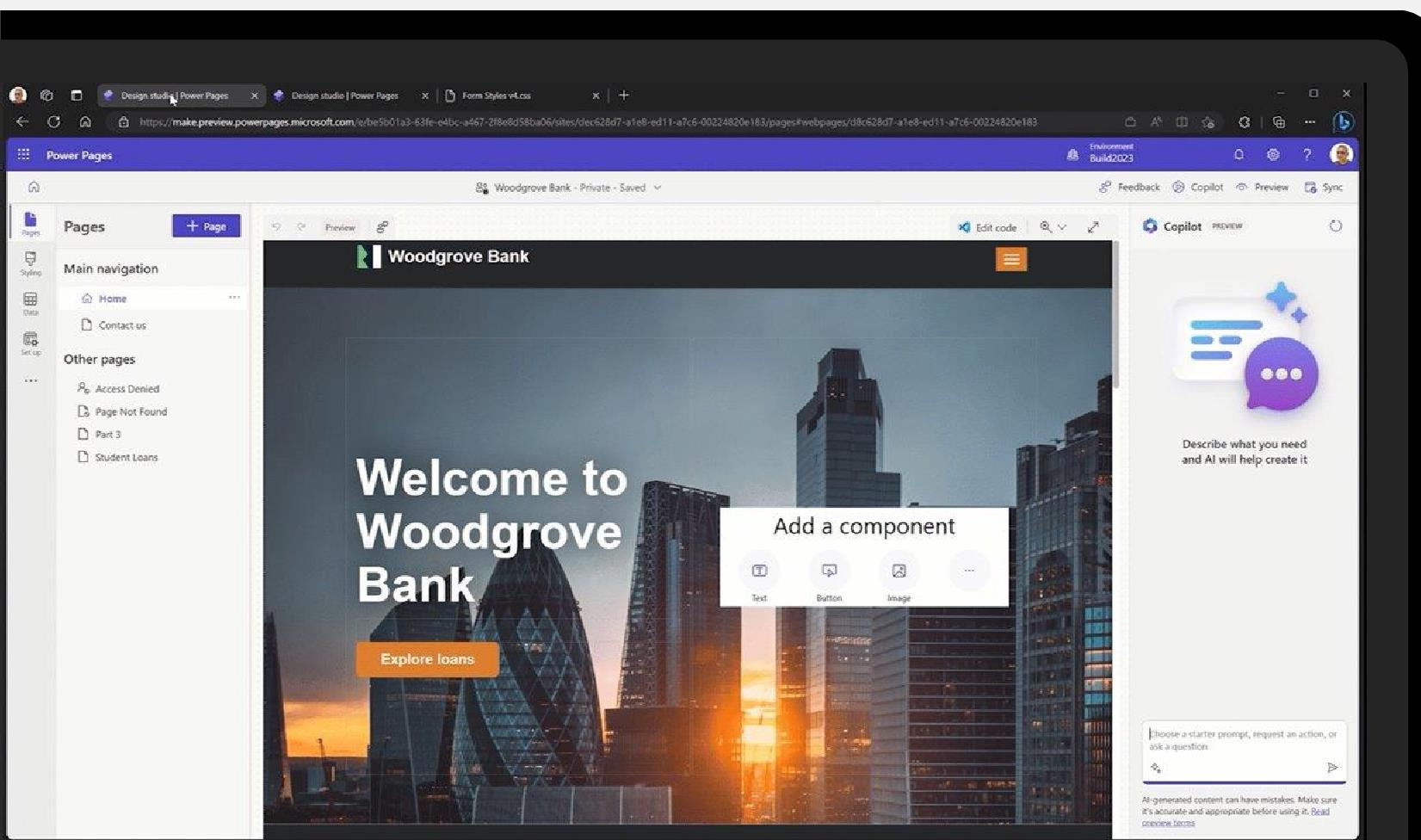
Your apps

Name	Modified ↓	Owner	Type
Bank Support Tickets - copilot - ben	37 minutes ago	Cherie Quek	Canvas
Bank Support Tickets	18 hours ago	Cherie Quek	Canvas
Bank Support Tickets - copilot	18 hours ago	Cherie Quek	Canvas

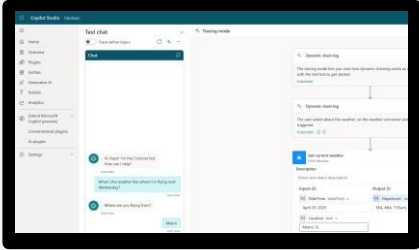
Ask a virtual agent



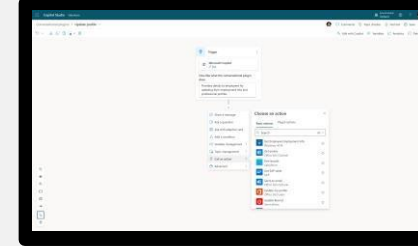
Copilot in Power Pages



What's in Copilot Studio?



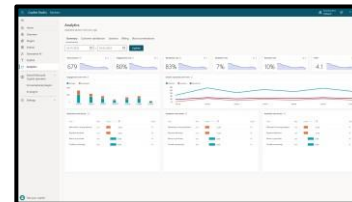
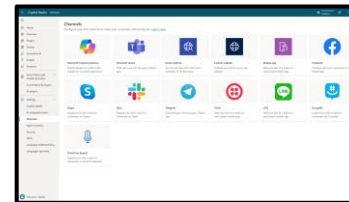
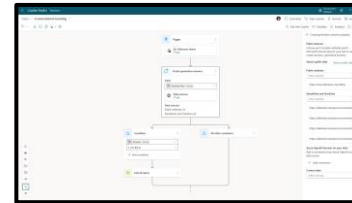
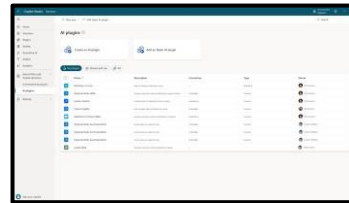
Workspaces



Copilot building studio

Use the **new studio** to create, test and deploy conversational copilots.

Including **advanced capabilities** of Azure copilot Framework natively in Copilot Studio.



Automation Studio

Drive action in **built in automation**. Use over 1000+ prebuilt and custom data connectors and digital process automation into your conversation flow.

Admin Studio

Deploy copilots securely using **central administration**, built security roles, and simple management across environments to maintain compliance and governance.

Copilots in M365



Microsoft 365 Chat

Combine the power of AI with your work data to unlock productivity and uplevel skills.



Copilot in Teams

Have more effective meetings, easily catch up on chats, and find information faster.



Copilot in Outlook

Start emails quickly, generate a summary, and catch up on long emails easily.



Copilot in Word

Start a draft, add to an existing document, rewrite text, or generate a summary.



Copilot in PowerPoint

Create beautiful presentations, organize and summarize presentations, and more.



Copilot in Excel

Go deeper with data, identify insights, generate formulas, and more.



Copilot in OneNote

Summarize your notes, create a to-do list, design a plan, and more.



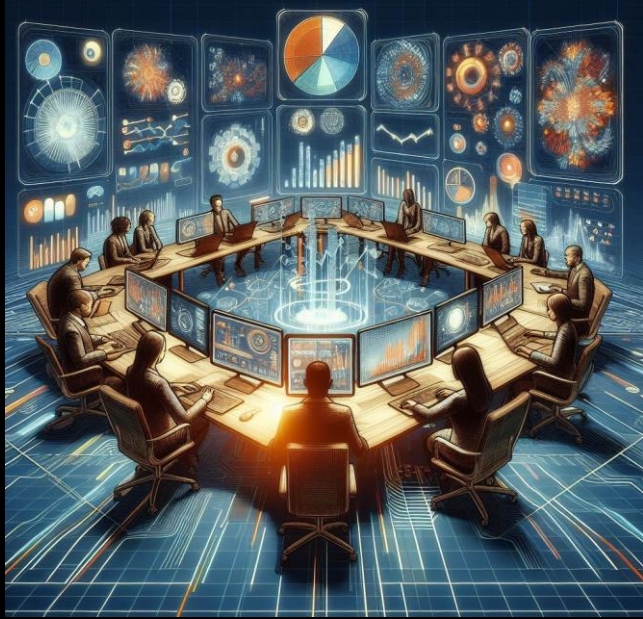
Copilot in Loop

Plan, brainstorm, create, and collaborate easier to stay in sync.



Copilot in Whiteboard

Creating, organizing, and understanding ideas has never been easier.



Step 1: How to get started with Gen AI

- Free Courses by 3 cloud providers
- Microsoft: [Microsoft Azure AI Fundamentals: Generative AI - Training | Microsoft Learn](#)
- Google: [What is generative AI and what are its applications? | Google Cloud](#)
- AWS: [Generative AI – Innovate Faster with Foundation Models - AWS \(amazon.com\)](#)



Step 2: Get Understanding Basics of AI

- Coursera
- [AI For Everyone | Coursera](#) By Andrew Ng (AI Godfather)
- [Generative AI for Everyone - Introduction to Generative AI - Week 1 | Coursera](#) By Andrew Ng
- [Generative AI with Large Language Models | Coursera](#)
- [ChatGPT Prompt Engineering for Developers \(coursera.org\)](#) By Andrew Ng
- [LangChain Chat with Your Data - Project Overview - Week 1 | Coursera](#)



Step 3: Getting Started with Python

YouTube Videos

- [Python Tutorial - Python Full Course for Beginners \(youtube.com\)](#) 37M videos
- [Learn Python - Full Course for Beginners \[Tutorial\] \(youtube.com\)](#) 43M views

Udemy

- [Course: Python for Beginners: Learn Python Programming \(Python 3\) | Udemy](#)
- [Course: Machine Learning, Data Science and Generative AI with Python | Udemy](#) (Gen AI with Projects)



Step 4: Microsoft AI Certifications

AI-900

- [Exam AI-900: Microsoft Azure AI Fundamentals - Certifications | Microsoft Learn](#)
- Udemy Course
[AI-900 Azure AI Fundamentals Exam Prep In One Day - OCT 2023 | Udemy](#)

AI-102

- [Collections | Microsoft Learn](#)
- Udemy Course
[AI-102 Microsoft Azure AI Solution Complete Exam Prep | Udemy](#)



Step 5: MOST IMPORANT SLIDE

