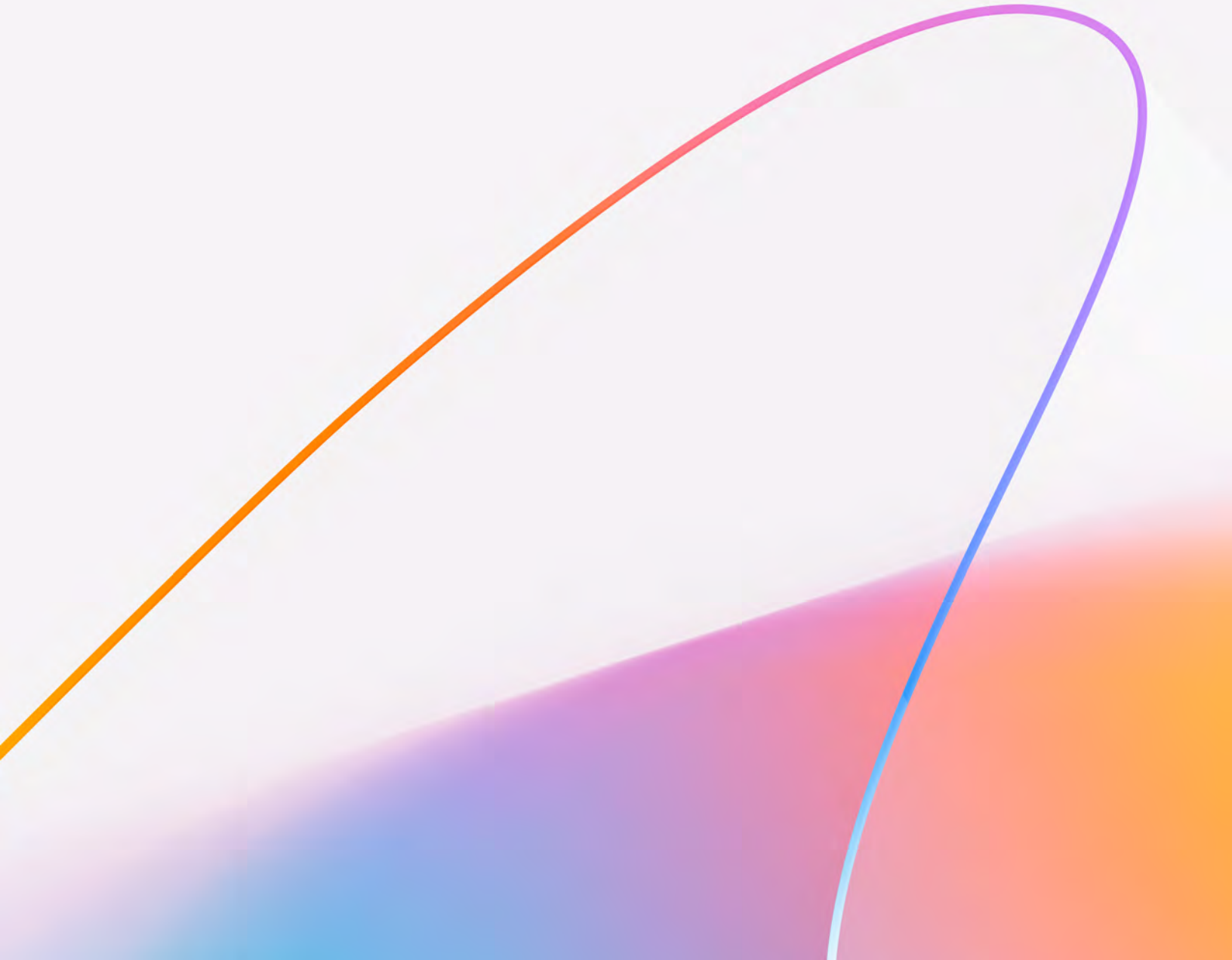
Microsoft Azure

Inspired by AI: Six Copilot Use Cases

Custom copilot use cases to spark your intelligent app strategy



Contents

Introduction

In the realm of tech-enabled productivity AI, copilots signify a huge leap forward for businesses.

Copilots are a new breed of intelligent apps that act as AI-powered productivity tools, using generative AI to create human-like interactions within digital experiences.

Copilots enable more seamless collaboration between people and the technology they use, helping businesses improve the quality of their work and deliver more convenient experiences for customers. Acting as always-on virtual helpers, they make it easy for users to search for information, discover deep insights and generate content – all from an interactive, natural chat experience. Essentially, copilots aren't just tools – they're collaborative partners that empower businesses to navigate a digital age that's growing in complexity every day.

Typically, the best tool for the job is the one built specifically for that job. While out-of-the-box copilots have many benefits, building your own copilot helps ensure that the AI interactions you implement – and the data powering them – amplify your unique strengths and drive your specific business goals.

This eBook examines six different use cases for building your own copilot and explores how those applications promote productivity and better customer experiences.

From chatbots to copilots: AI assistants for modern businesses

Chatbot technology has made significant strides over the past few years.

In their earliest form, basic decision tree chatbots – called rule-based or scripted chatbots – relied on predetermined rules and responses. Using specific keywords or triggers, people interacting with these chatbots can follow a structured flowchart to get answers to basic questions. However, it doesn't take much to reach their limits.

Copilots, on the other hand, are free from the traditional decision tree model. They offer more contextual and human-like user interactions using generative AI and natural language processing. Analysing extensive datasets, copilots can grasp nuanced user inputs and prompts, providing natural responses that help humans engage more efficiently with their digital tools. Copilots are paving the way for greater impact with AI by enabling richer interactions between humans and machines.

The competitive advantage of copilots

Whether someone is at work or interacting with a business as a customer, everyone expects quick and intelligent digital interactions.

As faster and more impressive technologies emerge, those expectations will continue to get higher. To keep pace with this ever-growing demand, you can either build your copilot application from the ground up or enhance existing applications by introducing a copilot as a new feature. Whichever path you choose, you'll have to answer that critical question: **how do you implement copilots that add real, tangible value to your business?**

Copilots provide a unique competitive advantage for both internal operations and external interactions. By delivering intelligent assistance to workers, you can enhance workforce productivity, reduce human error and enable a better understanding of customer needs.

On the customer side, copilots offer a convenient avenue for real-time assistance and a dynamic tool for interacting with your business. With AI-powered assistance available around the clock and trained on your company's data, customers get more access to faster and more convenient service, driving up loyalty and helping you maintain a reputation for customer service.

Copilot use cases: Build and modernise better experiences for all

Copilots can enhance experiences across various use cases, providing speed, convenience and personalisation that's been impossible until now.

The magic of copilots is in their ability to process huge volumes of data while providing natural interactions with users in all settings.

Below are six examples of custom-built copilots and the benefits they deliver to organisations, their employees and their customers.

Custom copilot use case 1: Connected smart products

Scenario: A smart home solution vendor wants to drive user retention by bringing a copilot into its app that allows customers to adjust settings using natural voice commands.

Copilot in action: This copilot would be an indispensable companion in helping end users manage their automated home systems. Seamlessly communicating with smart devices throughout the user's home, it could respond to voice commands and proactively suggest optimisations, letting users effortlessly control lighting, temperature and security. By providing an intuitive home management copilot, the supplier helps its customers craft a more comfortable and personalised home environment, ensuring users stay loyal to that solution.

Custom copilot use case 2: Transaction processing at scale

Scenario: An insurance provider who wants to boost productivity decides to build a copilot that frees its agents from manual tasks while processing claims.

Copilot in action: Processing and analysing insurance claims are time-consuming tasks that can easily monopolise agents' time. A copilot used in this context would be able to assess the claim against business rules and the nuanced details of insurance policies, then determine if the claim is valid and meets the policy requirements. Not only would it speed up the analysis of the claim, it would eliminate the need for agents to sift through tons of documentation, enhancing productivity and giving agents more time to give personalised attention to clients.

Custom copilot use case 3: Real-time fraud detection

Scenario: A bank wants to integrate a copilot into its existing fraud detection solution to surface real-time insights so they can be more proactive about preventing financial fraud.

Copilot in action: In this use case, a custom copilot grounded on the bank's data could help reduce false positives and improve accuracy in detecting fraudulent patterns. When potential fraud is detected, the copilot generates detailed alerts for bank agents, initiating automated investigations that cross-reference data from different sources. Based on the investigation results, the copilot could also assign risk scores to flagged transactions or accounts, allowing the bank to priortise high-risk cases for immediate action in case they need to block a transaction or freeze an account. By streamlining the fraud detection process and enabling proactive prevention measures, the copilot enhances the bank's efficiency, reduces financial losses and Copilot Pro and safeguards customer assets and trust.

Custom copilot use case 4: Service and support bots

Scenario: An automotive company wants to improve driver safety by introducing generative AI capabilities that help drivers keep their hands and eyes focused on the road.

Copilot in action: An automotive copilot like this one would let drivers use voice commands to control settings in their vehicle, like temperature, window positions and entertainment, so they could avoid having to look away from the road to interact with a touchscreen. Running in the background, the copilot would also monitor the driver's behaviour and the road environment, delivering audio cues to focus the driver's attention when it determines driving action should be taken. The driver gets a safer and more comfortable driving experience. At the same time, the automotive company gains a competitive edge by offering innovative safety features, improving brand reputation and potentially reducing insurance claims.

Custom copilot use case 5: Information and product discovery

Scenario: An industrial supplier wants to improve fulfilment and grow customer satisfaction by building a copilot that streamlines inventory discovery.

Copilot in action: In this scenario, an industrial supplier has recognised that its employees are spending significant time searching for specific items within their vast inventory of parts, materials and equipment. By building a discovery assistant copilot, the workers can use natural language queries to get real-time information on inventory availability, location and specifications. It could also be customised to the company's specific inventory structure and seamlessly integrated with existing systems for enhanced functionality and tailored user experiences. Employees are empowered to retrieve items faster, while the company benefits from improved efficiency and enhanced customer service through timely fulfilment.

Custom copilot use case 6: Personalisation and recommendation

Scenario: An online fashion retailer wants to increase sales by building an AI-powered experience that provides curated product selections to customers in a conversational setting.

Copilot in action: For some customers, shopping is a better experience if there's someone around to chat with about your possible purchases. A generative AI shopping assistant embedded into the retailer's website could provide a natural shopping interaction for customers looking for a more supported shopping experience. Through a natural chat experience, the copilot gradually learns the shopper's preferences so it can offer items that fit that shopper's unique tastes – creating a more engaging experience for the shopper while also encouraging more purchases.

Copilots on the job

Learn how these companies are already using their copilots to simplify work and deliver exceptional customer experiences.

KPMG delivers huge productivity gains and drives new business with generative AI

KPMG Australia deployed a generative AI agent called KymChat to help its 10,000 employees surface data and client insights from its external and internal websites, knowledge repositories and Microsoft 365 productivity files. As the solution grew, KPMG added more functionalities to make it more scalable and improve the quality of responses, allowing high-quality results to be delivered in under one second.

Read the whole story ›

TomTom enhances the driving experience with generative AI

TomTom created an immersive in-car infotainment system called Digital Cockpit to let drivers communicate with their vehicles naturally. The generative AI chatbot helps drivers navigate to locations, find stops along their routes and vocally control onboard systems.

Read the whole story ›

Launch your intelligent app strategy with Azure

The cloud provides the scalability, flexibility and accessibility needed to build and modernise with AI.

If your strategy includes using AI to provide intelligent, natural support to employees and customers, copilots will likely play a key part in that strategy.

Whether you're looking to build from scratch or bring a copilot into an existing solution, Azure enables developers to mobilise the capabilities of AI, large-scale cloud data and cloud-native app development to craft unique digital experiences. By creating or updating intelligent applications that use top-tier AI technology, businesses can drive innovation, expand their customer base and cut costs through improved efficiencies. Moreover, they can attract, retain and develop developer talent by offering reliable tools and services for building intelligent apps that give them a competitive edge.

Business value of intelligent apps

Using Azure AI Services and app development solutions like AKS and Azure Cosmos DB helps organisations build and modernise intelligent apps quickly and securely. Over a three year period, composite organisations using these solutions saw significant gains in productivity and efficiency in their app development processes thanks to automation and improved scalability for their AI models.

- → **40%** decrease in customer support tickets[1]
- → **150%** increased work output[1]
- → Up to **25%** increased developer efficiency[2]
- → Up to **25%** reduced app downtime[3]

1: The Total Economic Impact™ of Microsoft Azure AI, a commissioned study conducted by Forrester Consulting, April 2023. Results are for a composite organization representative of interviewed customers.

2: According to a commissioned survey, 77% of 144 respondents experienced increased developer efficiencies in a range of 10% to 25%. The Total Economic Impact™ of Microsoft Azure App Innovation, a commissioned study conducted by Forrester Consulting, June 2023

3: According to the commissioned survey data, after implementing these modern technologies, downtime related to applications decreased by an average of 15% to 25%. The Total Economic Impact™ of Microsoft Azure App Innovation, a commissioned study conducted by Forrester Consulting, June 2023.

Tools of the trade: How to build a custom copilot with Azure

Building and modernising intelligent apps requires having a whole stack spanning data unification, innovative AI capabilities and modern app development practices. By integrating tools and services like the ones below, you can build a custom copilot and ground it in your data to bring intelligent search, chat and generative AI capabilities to your experiences.

Azure OpenAI Service

By providing access to OpenAI's language models, Azure OpenAI Service gives developers the ability to build sophisticated, responsive and responsible intelligent apps. Use state-of-the-art language models to build copilots that understand and generate human-like text, crafting natural and productive chat experiences for customers and employees alike.

Copilots built using Azure OpenAI Service can be trained on specific datasets to tailor the model to a particular domain, letting you customise how the AI behaves and responds to different use cases. Meanwhile, an integrated content filtering system works alongside the models to help detect harmful content and prevent it from impacting the quality of those interactions, which is critical for ensuring trust and transparency.

Available models

With Azure OpenAI On Your Data – which grounds and retrieves data – you can run advanced AI models such as GPT-35-Turbo and GPT-4 on your enterprise data without needing to train or fine-tune models. The generative AI and multimodal AI models available on Azure OpenAI Service are optimised for enterprise-calibre privacy, security and scale:

- → **GPT-4 series (including GPT-4 with Vision)**
- → **GPT-3.5 Turbo series**
- → **Embeddings model series**
- → **DALL-E**
- → **Whisper**
- → **Text-to-speech**

Optimising your models, your way

The **On Your Data** feature of Azure OpenAI Services lets you connect your data sources directly to the service, grounding the generated results with your data. With this feature, users designate the data source and location where their data remains stored, eliminating the need to copy data into the Azure OpenAI service. This feature not only provides seamless integration of AI capabilities with existing data infrastructure but also ensures data privacy and security by allowing you to maintain control over your data.

Azure Kubernetes Service (AKS)

AKS is a managed Kubernetes service that simplifies the deployment and operation of containerised apps. It provides a robust and scalable infrastructure essential for building, deploying and managing custom copilots that are responsive, intelligent and capable of integrating with a wide array of data sources and AI services.

AKS ensures copilots can access necessary information by facilitating data ingestion at scale and providing connectors to integrate with diverse data sources. It also has native integrations with Azure Cosmos DB to enhance copilot functionality, such as language understanding and generation through Azure OpenAI Service.

Azure Cosmos DB

Azure Cosmos DB is a fully managed, serverless distributed NoSQL database for modern, cloud-native app development, including intelligent applications and copilots. Offering SLA-backed speed and availability, automatic and instant scalability and open-source APIs for native JSON documents, MongoDB and other NoSQL engines, it provides a scalable and secure place to store the diverse datasets that a copilot might need to access, such as user interactions, preferences and other relevant data.

Azure Cosmos DB ensures low-latency access to data, and dynamic autoscale, which both are crucial for copilot's responsive performance. Azure Cosmos DB is a vector database that can store both NoSQL data such as documents and key-value pairs, as well as vectors in the same database. Vector search (a.k.a. known as semantic/similarity search) is an important feature for Generative AI applications, and Azure Cosmos DB is able to query both vectors and relevant data efficiently.

Azure Cosmos DB also features native vector search capabilities, which are especially useful in apps that need to search for similar text, find related images or detect anomalies. Plus, with its ability to handle NoSQL queries, Azure Cosmos DB is useful for building copilots that need to process unstructured or semi-structured data efficiently.

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