



Drive transformation with AI

Raido Orumets
Business Manager, Cloud | Arrow



Telegrupp AS
IT-, side- ja turvalahendused

Teemad

Copiloti erinevad versioonid

Kuidas LLM-id ja Microsoft Copilot töötavad

Copiloti arhitektuur

Graph-grounding ja Enterprise Data Protection roll Copilotis

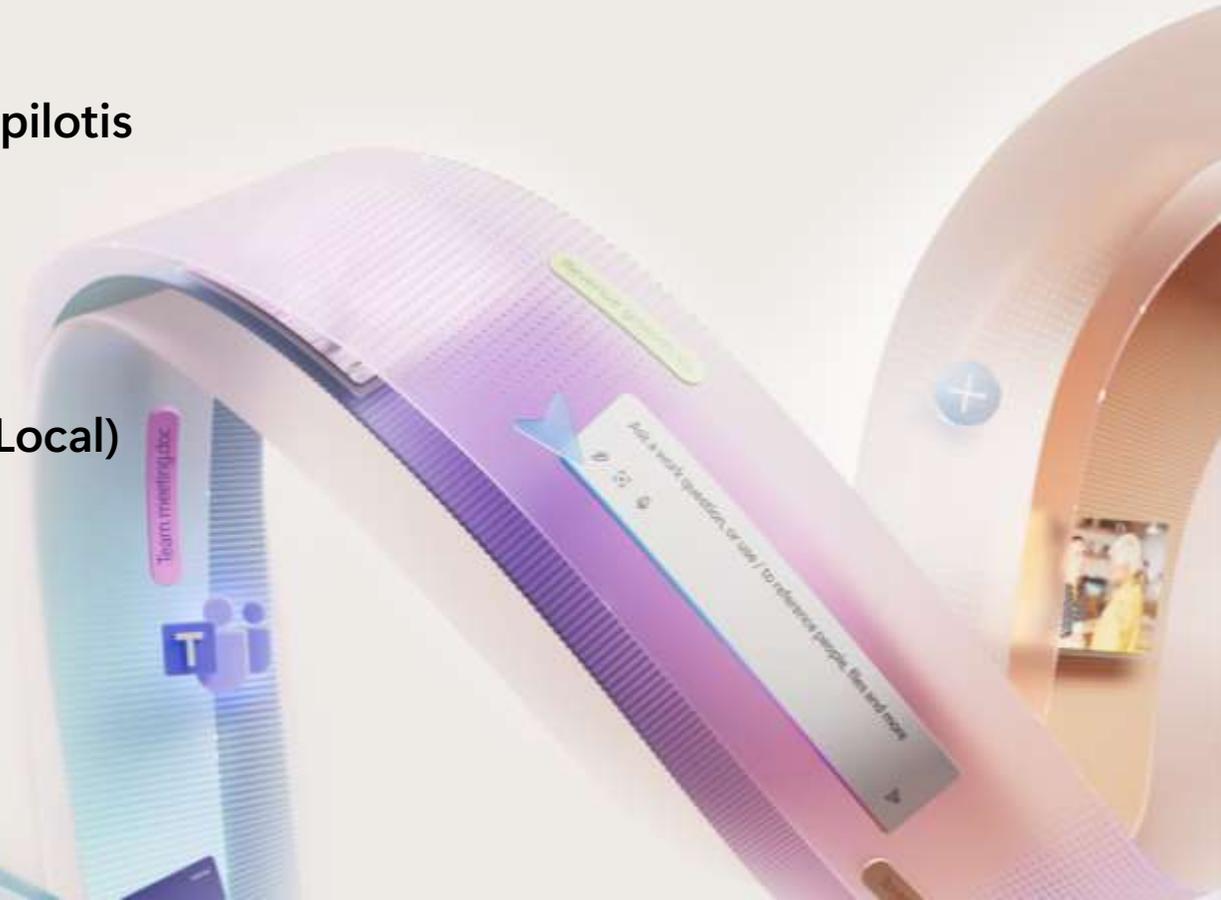
„Prompting“ - Parimate otsingute praktikad

Copilot M365s: praktilised töövood

„MS pilv koju“: suveräänsus, Azure Arc & Azure Stack (Local)

MS Gov pilv EL-i kontekstis

Q&A, järgmised sammud



A new AI Power User emerges



AI Power users save on average 30 minutes per day—that's over 10 hours per month.



AI makes their workload more manageable



boosts their creativity

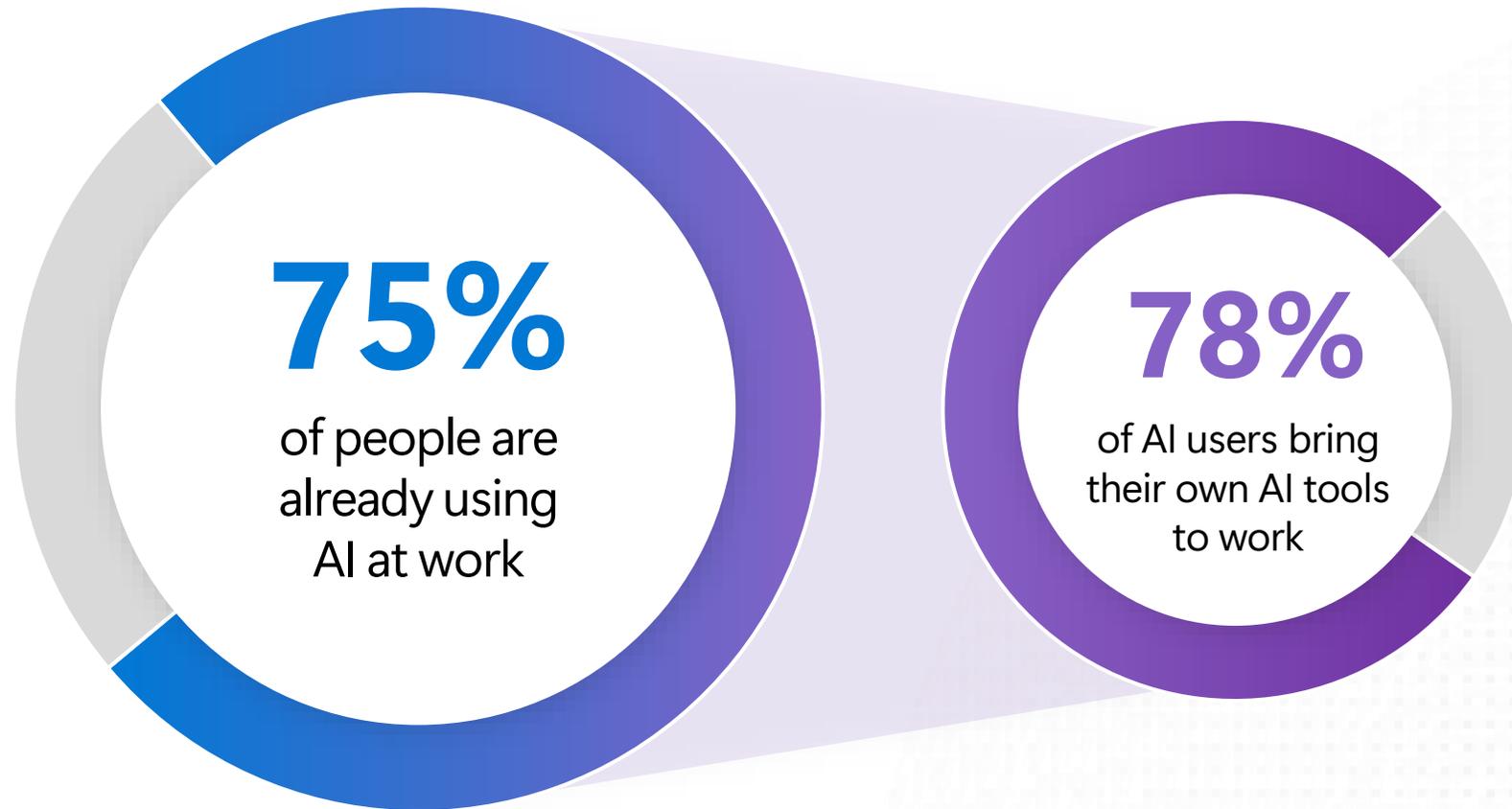


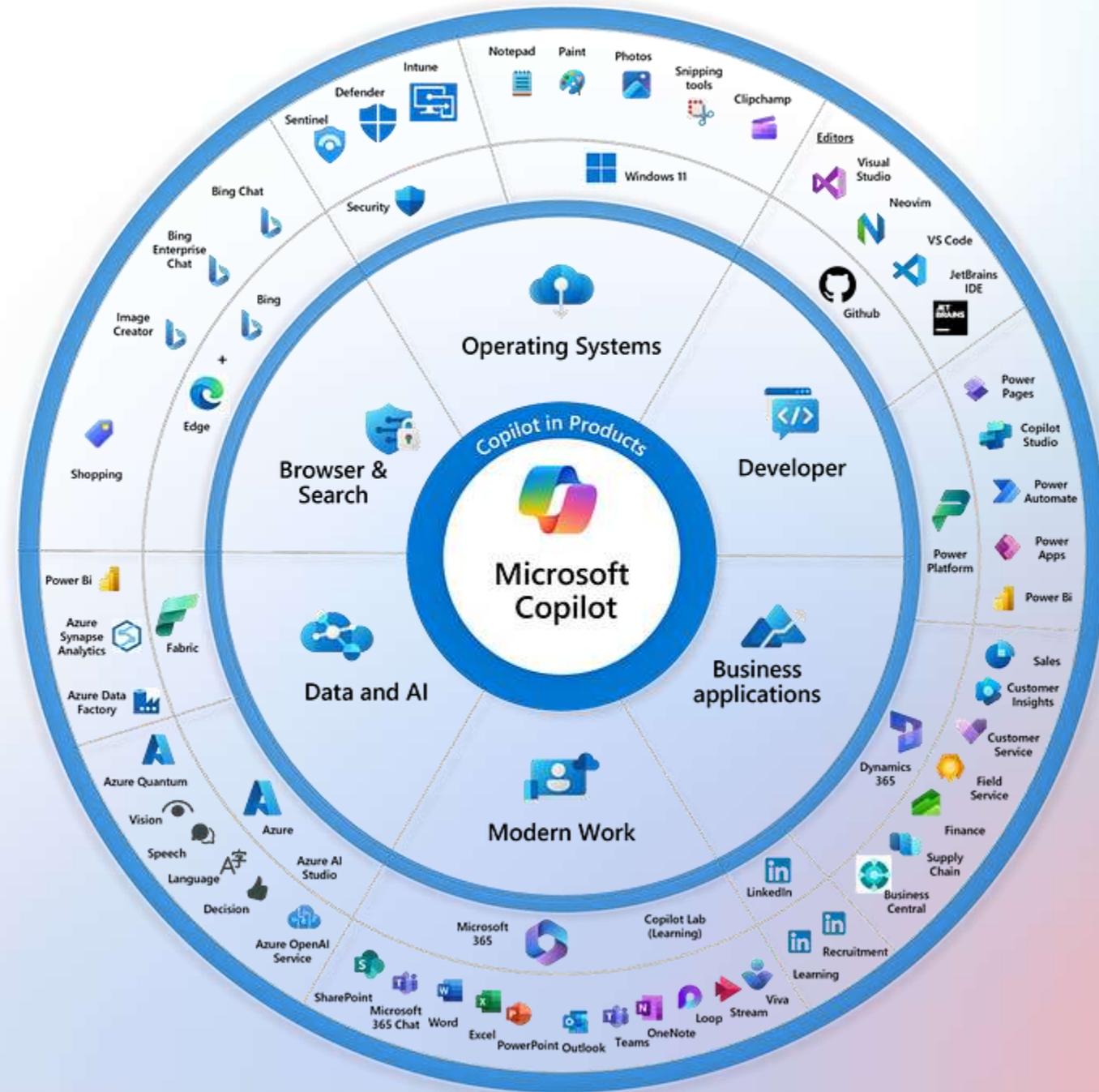
helps them focus on the most important work



makes work more enjoyable

AI has come to work





Innovate: Microsoft Copilots

M365 Copilot

Bing



Better Q&A and task completion

Edge



Better interaction with web content

Word



Better reading and writing assistance

Outlook



Better e-mail management

Excel



Better data analysis

PowerPoint



Better presentations

Teams



Better Meetings

Business Chat



Better knowledge management

Designer



Better digital creations

Windows Copilot



Better interaction with OS, apps, and files

Copilots for Web

Copilots for Productivity

Copilot for Creativity

Copilot for Everyday

Dynamics Copilot



Better sales and customer support

Copilots for Business

Fabric Copilot



Better data analytics and business intelligence

Copilots for Analytics

Security Copilot



Better threat detection, identification, and mitigation

Copilot for Security

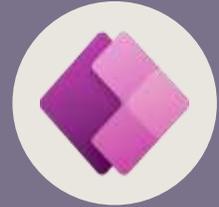
GitHub Copilot



Better code development

Copilot for Development

Copilot Studio



Better creation of apps, workflows, and agents

Copilot for Low/No Code Development



Copilot Portfolio

Microsoft Copilot for Sales

Close more deals with the AI assistant designed for sellers

- + Out-of-the-box CRM connectivity
- + Real-time sales insights
- + Customer-specific Sales content generation

Microsoft Copilot for Service

Modernize your contact center with a copilot designed for service

- + CRM and knowledge source connectivity
- + Case and service insights
- + Embed into third-party agent desktops

Microsoft Copilot for Finance

Streamline financial processes with the AI assistant for finance

- + ERP and financial systems connectivity
- + Contextualize insights
- + Automate workflows

Copilot Studio

Customize Copilot for M365 and build agents

Copilot for all



Microsoft 365 Copilot
Your AI assistant for work

Copilot Chat



- Agents, including prebuilt Microsoft 365 and agents
- Personal assistant across Microsoft 365 apps
- Advanced management
- Copilot Pilot Dashboard to understand usage and adoption
- Prebuilt reports and advanced analytics to quantify ROI



Microsoft Copilot

Copilot

Microsoft
365 Copilot

Copilot for
Sales

Copilot for
Service

Free

\$30

\$50

\$50

Foundational Capabilities



Web grounding



Enterprise Data Protection



Enterprise-Grade Data Protection



Graph Grounding



Microsoft 365 Apps



Copilot Studio



Role Specific capabilities



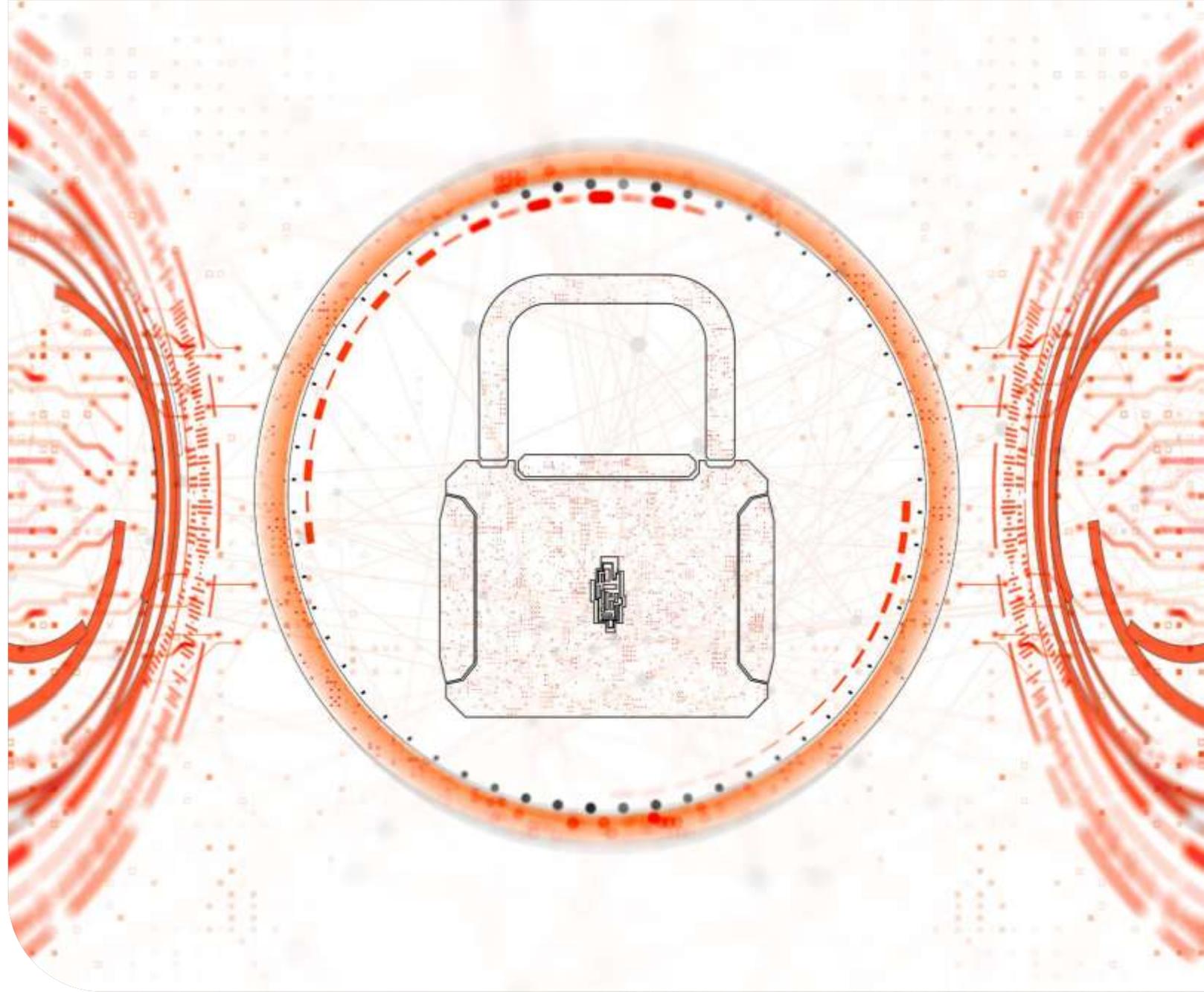
COPILOT'S COMMITMENT TO DATA SECURITY AND PRIVACY

Enterprise Security Standards

Copilot is designed to meet strict enterprise security standards ensuring robust data protection.

Zero Data Retention

Copilot does not store or use organizational data to train AI models, ensuring data privacy.



Microsoft 365 Copilot is the AI assistant you can trust



Security

Honors your existing permissions

Persistent label inheritance and DLP policies

Risk-based conditional access and endpoint management



Governance & Compliance

Ramp your data preparedness for AI

Detect and investigate non-compliant usage

Guided assistance to remain compliant with AI regulations



Privacy

You control your data

You control your data location

Your data isn't used to train foundation models

Your Microsoft 365 security, governance, compliance, and privacy policies

Microsoft 365 Copilot is the AI assistant you can trust



Your data is
your data



Your data is
not used to
train or enrich
foundation AI
models



Your data and
AI models are
protected at
every step



We'll defend
you with our
**Customer
Copyright
Commitment**

Learn more about our [Customer Copyright Commitment](#)

Microsoft protects your data and enables you to control it

Protecting your data through the LLMs



Security and
Compliance



Data Usage
and Privacy



Committed to
responsible AI

Inheriting Microsoft 365 policies and controls



Data access &
permissions



User-tenant
focus



Customer data
protection



Data processing
and residency



Secure and govern Copilot with Microsoft Security



with



Security



Compliance



Privacy



Responsible AI



Discover AI risks

Identify sensitive data in Copilot interactions with **ready-to-use classifiers and labeling**

Understand user activities and detect risky access to Copilot with **audit logging**

Identify potentially overshared content by **reviewing SharePoint site permissions**



Protect sensitive data

Protect access to sensitive data in Copilot interactions with **persistent labeling and DLP policies**

Restrict or block risky access with **risk-based conditional access and endpoint management**

Prevent idle or excessive access with **SharePoint site wide access controls**



Govern Copilot usage

Retain and log Copilot interactions, **automatically remove inactive content**

Use built-in classifiers to **detect non-compliant use of Copilot**

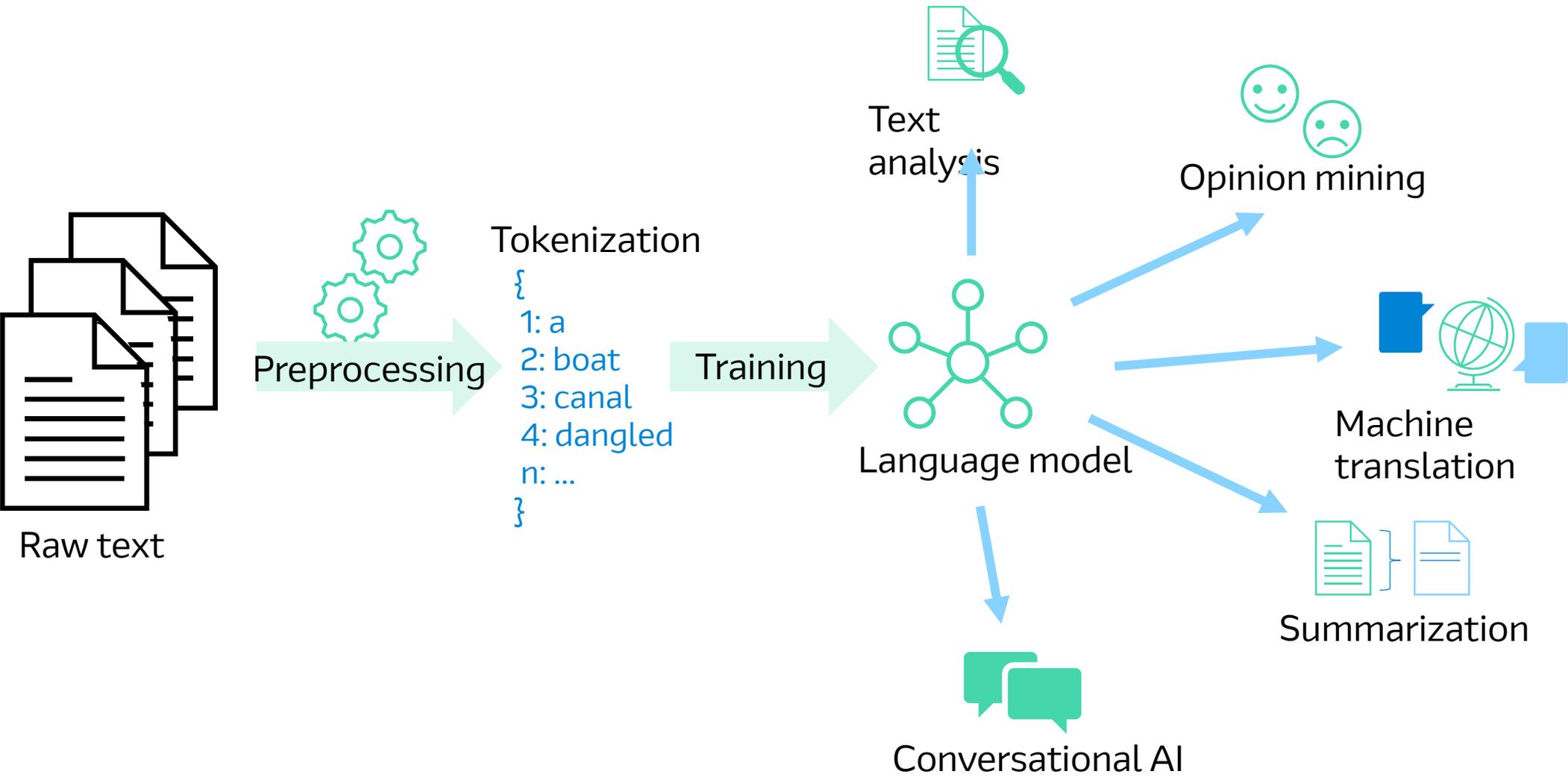
Preserve, review, and analyze prompts and responses to **investigate security and compliance incidents**

Large language models

Generative AI applications are powered by *large language models* (LLMs), which are a specialized type of machine learning model that you can use to perform natural language processing (NLP) tasks, including:

- Determining *sentiment* or otherwise classifying natural language text.
- Summarizing text.
- Comparing multiple text sources for semantic similarity.
- Generating new natural language.

What is natural language processing?





Copilot for Microsoft 365

Natural Language



Large Language
Models

+



Microsoft Graph
- Your Data -

+



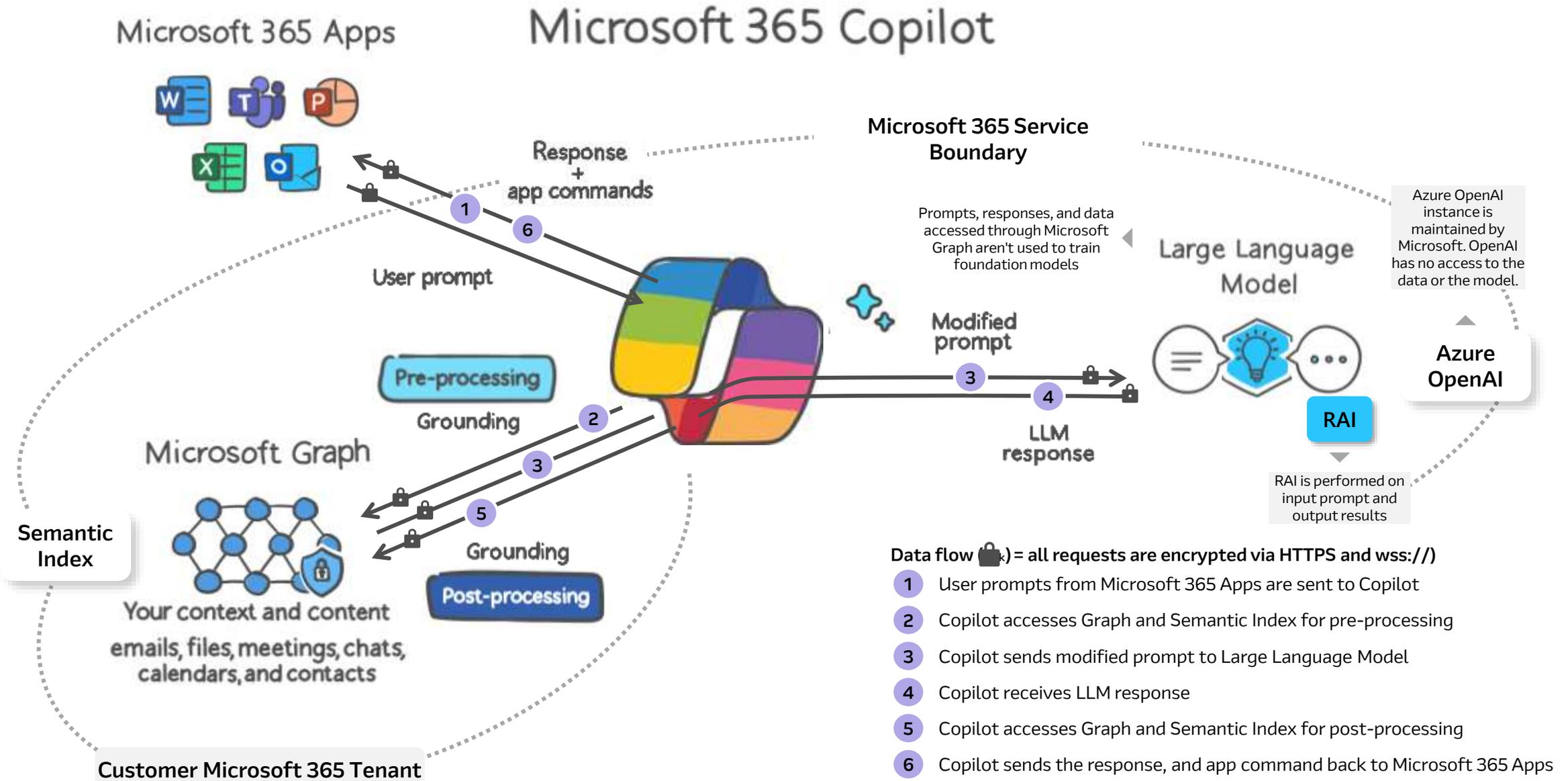
Microsoft 365
Apps

+



The
Internet

Microsoft 365 copilot basic architecture



INTEGRATION OF MICROSOFT GRAPH FOR CONTEXTUAL RESPONSES

Microsoft Graph Integration

Copilot integrates emails, documents, calendar, teams, and projects using Microsoft Graph to provide contextual responses.

Contextual and Personalised Responses

Responses are based on user access ensuring suggestions and summaries are relevant, personalised, and up to date.

Use of Existing Company Data

Copilot does not generate new information but uses existing company data combined with AI model knowledge.



Top 10 to "Try First"

with Microsoft 365 Copilot

Foundational skills for new users



1

Recap a meeting

– let Copilot keep track of key topics and action items so you can stay focused during the meeting and avoid listening to the recording after.

→ Draft an email with notes and action items from meeting



2

Summarize an email thread

– get quickly caught up to a long, complex email thread.

→ Click on the Summarize icon



3

Draft email

– personalize the tone and length.

→ Draft an email to [name] that informs them that Project X is delayed two weeks. Make it short and casual in tone.



4

Summarize a document

– get right down to business by summarizing long documents and focusing on the relevant sections.

→ Give me a bulleted list of key points from file



5

Tell me about a topic/project

– provide insights and analysis from across multiple sources to get up to speed quickly.

→ Tell me what's new about topic organized by emails, chats, and files?



6

Give me some ideas for ...

– boost your creativity with ideas for your work such as agendas, product names, social media posts, etc.

→ Suggest 10 compelling taglines based on file



7

Help me write ...

– jumpstart creativity and write and edit like a pro by getting a first draft in seconds.

→ Generate three ways to say [x]



8

What did they say ...

– when you vaguely remember someone mentioning a topic, have Copilot do the research.

→ What did person say about topic



9

Revise this content

– when you've got a rough draft of an idea, turn it into usable text and then vary the length and tone.

→ Rewrite with Copilot



10

Translate a message

– with business becoming increasingly international, it's important to be able to read or write messages in other languages.

→ Translate the following text into French:

For more prompts, visit Copilot Lab at: aka.ms/CopilotLab

Kunst ja teadus: kuidas kirjutada häid prompt'e

Saa Copilotist rohkem kasu ja väldi tüüpilisi eksimusi, õppides **mida teha** ja **mida mitte teha** prompt'e kirjutades.

Do's

Ole selge ja konkreetne.

Anna Copilotile täpsed juhised: teema, eesmärk, toon ja pikkus.

Hoia vestluslik still. Anna Copilotile tagasisidet vastuste põhjal — nii kohandub ta su eelistustega.

Too näiteid. Kasuta selgeid märksõnu või fraase, kui soovid Copilotil lasta teksti genereerida. See aitab luua täpsemat ja loovamat sisu.

Küsi tagasiside. Kasuta selgeid märksõnu või fraase, kui soovid Copilotil lasta teksti genereerida. See aitab luua täpsemat ja loovamat sisu

Kontrolli tagasiside. Copilot võib teha vigu ja anda ebakorrektsid vastuseid. Ole vastuste suhtes kriitiline.

Ole täpne ja detailne. Kontekst (žanr, tegelased, sihtrühm, eesmärk) aitab luua paremaid vastuseid.

Don'ts

Ära anna vastukäivaid juhiseid.

Mitme või vastuolulise info lisamine samasse prompt'i segab mudelit ja halvendab vastust.

Ära katkesta ülesannet poole pealt.

See võib kirjutamisprotsessi häirida. Uut ülesannet alustades kirjuta "Uus ülesanne."

Ära ole liiga üldine.

Vältida tuleks ebamääraseid sõnastusi — täpsus = kvaliteet.

Ära kasuta slängi või liialt kõnekeelset väljendust.

See võib viia ebaselgete või ebaprofessionaalsete tulemusteni.

Tip: Ask “why” and “how” questions

1. Try asking Copilot *why* something isn't working or *how* to do the task in Excel, instead of asking it to do it for you.

2. If Copilot doesn't seem to understand what you want, try rephrasing your prompt with different words.

Why isn't the Date column sorting to show dates in the right order?

The issue might be due to the date format in the "Date of transaction" column. Ensure that the dates are recognized as date values by Excel. Here are the steps to check and correct this:

- Select the Date Column:**
 - Click on the header of the "Date of transaction" column to select the entire column.
- Check the Format:**
 - Go to the "Home" tab on the ribbon.
 - In the "Number" group, check the format dropdown. It should be set to "Date."
- Convert Text to Date (if necessary):**
 - If the dates are not recognized correctly, you can use the DATEVALUE function to convert them.
 - Insert a new column next to the "Date of transaction" column.
 - Use the following formula to convert the text to date values:

```
fx  
=DATEVALUE([@[Date of transaction]])
```

- Copy the formula down the entire column.
- Copy the new column and paste it as values over the original "Date of transaction" column.
- Delete the temporary column.

- Sort the Column:**
 - Select the "Date of transaction" column again.
 - Go to the "Data" tab on the ribbon.
 - Click on "Sort Oldest to Newest" or "Sort Newest to Oldest."

This should ensure that the dates are sorted correctly.

AI-generated content may be incorrect

How would I write a formula to bring in the revenue in USD from the Revenue worksheet?

To bring in the revenue in USD from the "Revenue" worksheet, you can use the VLOOKUP function. Assuming the "Revenue" worksheet has columns "Currency code" and "Revenue in USD", you can use the following formula:

```
fx  
=VLOOKUP([@[Currency code]], Revenue!A:B, 2, FALSE)
```

This formula looks up the "Currency code" in the "Revenue" worksheet and returns the corresponding "Revenue in USD". Make sure to adjust the column references if they are different in your "Revenue" worksheet.

AI-generated content may be incorrect

Please use the thumbs up and down to let us know your experience! The Excel team spends a lot of time reviewing these – and include a screenshot if possible, that context is very helpful.

Copilot Business Chat



A screenshot of the Copilot chat interface. The interface is white with a light blue sidebar on the left containing icons for Home, Copilot (highlighted with a red box), Pages, Create, OneDrive, Apps, and Admin. The main area has a 'Work' and 'Web' toggle, a 'New chat' button, and the Copilot logo. Below the logo are six suggestion cards:

- Stay informed**: What's the latest from [Alan Ois](#), organised by emails, chats, and files?
- Provide good feedback**: Give examples of constructive criticism for the workplace
- Sharpen your writing**: Analyse the text in the following and make suggestions on how to improve it: [text]
- Make it stand out**: Suggest a few subjects for the following email: [paste email body here]
- Check Teams mentions**: Summarise Teams messages where I was @mentioned this week
- Arrive prepared**: Help me prepare for my next meeting

At the bottom, there is a 'View prompts' link and a 'Message Copilot' input field with an 'Add content' button and a character count '0 / 10000'.

A screenshot of a browser search bar. The search bar contains the text 'Search BCS AS and the web'. To the right of the search bar is a Copilot icon (highlighted with a red box). The browser's address bar shows 'search or enter web address' and 'Siseveeb' as a search engine. The browser's toolbar includes icons for search, back, forward, and other navigation functions. The background of the browser shows a search results page with a penguin image and the location 'Tallinn'.

Differentiating between Business Chat modes

Use the toggle to switch between work and web modes

1 Consider using the following prompts in the **web mode**: “Create an advertising flyer for my work’s recycling effort using earth toned colors. Ensure the ethos of reduce, reuse, recycle is present.”

- “Recap today’s news about the S&P 500. Identify the top trends among best performing companies.”
- “Summarize the page I have open in Edge. What are the top3 takeaways in bulleted format?”

2 Consider using the following prompts in the **work mode**: “Summarize the last 5 emails from my boss over the past few days and stack rank them in order of most important to least important, based on your analysis.”

- “Review my meetings this week to create 5 to 7 categories that describe how I am spending my time in percentages.”
- “Take the [Analysis for FY25] doc that XX sent me last week and the transcript of the meeting we had on that topic this afternoon to give me 5 recommendations for next steps.”

Use web mode to get answers from **current web data**
(e.g., latest news, announcements)



Use work mode to get answers from **your internal work data**
(e.g., your emails, meetings, files)

Copilot Business Chat



The image displays two overlapping screenshots of the Copilot Business Chat interface. The top screenshot shows the 'Web' mode selected, with a red box highlighting the 'Web' button. The bottom screenshot shows the 'Work' mode selected, also with a red box highlighting the 'Work' button. Both screenshots feature a sidebar with navigation options like Home, Copilot, Pages, Create, OneDrive, and Apps. The main area contains various AI-generated prompts such as 'Get more done', 'Improve your writing', 'Stand out on socials', 'Code a binary search in Python', 'Stay informed', 'Provide good feedback', and 'Sharpen your writing'. A 'View prompts' link is visible at the bottom of each chat area.

Set KPIs by function



Customer Service

- First Call Resolution (FCR) rate
- Calls answered by agents
- Issue resolution time
- Customer retention
- Case volume
- Time to first response
- Average call time
- Customer experience (CSAT)



Sales

- Opportunities pursued
- Deal size
- Win rate/close rate
- Customer retention
- Average discount size
- Upsell/cross sell rate
- Cost per lead
- Sales cycle length



Finance

- Finance outsourcing spend
- Cost per analysis request
- Deal review time
- Time to close
- Compliance rate
- Forecast accuracy
- Employee retention
- Day sales outstanding



Marketing

- Leads generated
- Agency spend
- Customer retention
- Employee retention
- Cost per lead
- Brand value
- Lead conversion rate
- Revenue per lead generated



HR

- Employee onboarding time
- Calls answered by agents
- Issue resolution time
- Employee retention
- Hiring cost per employee
- Administrative cost per employee
- First call resolution rate
- Workforce demographics



Legal

- Outside counsel spend
- Cost per internal review
- Compliance rate
- Contract error rate
- Number of disputes
- Dispute win rate



IT

- IT operation costs
- IT issue/ticket resolution time
- IT outsourcing costs
- Product adoption and usage
- Application downtime
- Network/infra reliability score
- Reduce shadow IT risk
- NSAT score/user satisfaction

Key Agents by function

Sales	Marketing	Customer Service	Legal	HR	Finance	IT
Opportunities pursued 	Leads generated 	First Call Resolution (FCR) rate 	Outside counsel spend 	Employee onboarding time 	Finance outsourcing spend 	IT operation costs 
Deal Size 	Agency spend 	Calls answered by agents 	Cost per internal review 	Calls answered by agents 	Cost per analysis request 	IT issue/ticket resolution time 
Win rate / Close rate 	Customer retention 	Issue resolution time 	Compliance rate	Issue resolution time 	Deal review time	IT outsourcing costs 
Customer retention 	Employee retention 	Customer retention 	Contract error rate	Employee retention	Time to close	Product adoption & usage
Average discount size	Cost per lead	Case volume	Number of disputes	Hiring costs per employee	Compliance rate	Application downtime
Upsell / Cross sell rate	Brand value	Time to first response	Dispute win rate	Admin cost per employee	Forecast accuracy	Network/infra reliability score
Cost per lead	Lead conversion rate	Average call time		First call resolution rate	Employee retention	Reduce shadow IT risk
Sales cycles length	Revenue per lead generated	Customer experience (CSAT)		Workforce demographics	Day sales outstanding	NSAT – User Satisfaction
Response rate						

Let us help you build a business case with these KPIs

 = KPIs included in the BCB

Copilot brings AI to everyone. Use apps like...

Copilot in...	Value Proposition	Exec/SLT	Manager	Marketing	Sales	HR	Finance	IT	Operations
Word	Create a new Word document based on a description or using internal files, Add images, add new content, create a summary, add a FAQ, etc. Provide suggestions to strengthen arguments or smooth out inconsistencies.		Generate summaries of documents for quick review and get help with revisions for executive white papers	Create a marketing plan with suggested objectives, strategies, and tactics.	Respond to an RFP faster by generating the content based on FAQs	Write a job description for a software engineer by suggesting skills, qualifications, and responsibilities	Draft a proposal on how to better use Treasury funds.	Write a proposal for a new solution	Create a new operating procedure using content from various manuals
Teams Meetings/ Teams Phone	Quickly recap, identify follow-up tasks, create agendas, and ask questions for more effective and focused meetings and calls.	Get caught up on meetings when joining late	Avoid going to meetings and use the meeting recap to get the summary	Capture product features from a product review	Ensure all action items are captured from a customer meeting or call	Conduct a group interview and analyze individual contributions to the discussion	Make a list of tasks from a meeting with business planning	Summarize the action items from the last bug bash recap	Recap the weekly status meeting and send out notes and action items
PowerPoint	Create a presentation complete with speaker notes and sources from up to three Word documents, add slides, add images, format and organize the presentation		Create professional presentations for departmental reviews from existing documents	Create a slideshow for a marketing strategy by suggesting the key points, data, and visuals	Revise a pitch deck with materials specific to your customer	Create training materials	Create a presentation summarizing annual business performance	Create adoption materials for a new product launch	Create a presentation showing the impact of the latest engineering upgrades
Outlook/ Teams Chat	Summarize email and chat threads with different viewpoints from each person and identify actions & open questions.	Manage email overload with instant summaries of key issues	Manage email overload with instant summaries of key issues	Catch up on threads each morning as the global design team works during your night	Get up to speed on a new account by querying past email and chat threads	Keep track of safety incidents reported via email	Track conversations on quarterly close and identify outstanding actions	Summarize an incident and steps to resolution	Track an operating issue over time.
Outlook/ Teams Chat	Draft email and chat replies based on the thread or other content, specify tone and length	Manage email overload with fast, professional replies	Manage email overload with fast, professional replies	Create an email campaign with suggested content, subject lines, and a call to action	Craft more personalized email replies to customers	Respond to job applicant emails quickly with professional content	Respond on invoicing questions quickly	Create an email summarizing the latest project status report and attach the file	Respond quickly to questions about an outage.
Copilot - Microsoft 365 Chat	Find and use info that's buried in documents, presentations, emails, calendar invites, notes, and contacts. Summarize information across multiple sources like recent customer interactions, meetings, shared content, and deliverables.	Prepare for meetings and get custom reports based on company documents	Prepare for meetings and create reports on departmental issues	Find the best marketing channels for your target market by analyzing your data, competitors, and industry trends	Prepare for a customer meeting by summarizing the customer asks and product team responses	Search for a candidate across a group of resumes	Summarize product information for a new product to help prepare for a meeting.	Search for solutions to specific error codes	Scan the organization's operations manuals to find solutions to issues quickly
Excel	Use natural language to analyze data, summarize key trends, and create charts to present data		Add to the financial analysis with what-if scenarios	Identify market trends and segments. Show marketing ROI by channel	Analyze sales data and determine close rates	Create a chart of employee turnover rates	Simplify financial reporting, identify trends and performance improvements	Identify application usage patterns and track issues	Generate an analysis of the latest defect rates for Six Sigma reporting

MICROSOFT 365

Copilot in Teams Meetings

The screenshot displays a Microsoft Teams meeting interface for a meeting titled "Core accounts business review" held on March 16 at 10:00 AM. The interface includes a navigation sidebar on the left with icons for Activity, Chat, Teams, Calendar, Calls, Files, and Apps. The main content area shows a "Shared content" section with a file named "Proseware Proposal.pptx". Below this is a video player showing a hand pointing at a screen, with a play button and a duration of 48m 42s. To the right of the video player are buttons for "Speakers" and "Topics". Under the "Topics" section, there are two topics listed: "Proseware negotiation strategy" and "Core accounts round table". On the far right, there are buttons for "Notes", "Mentions", and "Transcript". The "Notes" section is expanded, showing a summary of the meeting content generated by Copilot, including a "Summary" and "Notes" section.

Core accounts business review Chat Details Files Recap +

Mar 16, 10:00 AM Open in Stream

Shared content

Proseware Proposal.pptx

48m 42s

Speakers Topics

Proseware negotiation strategy

Core accounts round table

Notes Mentions Transcript

Core accounts.loop

Quarterly results and forecasts for Core Account

Summary

Based on what attendees said in the meeting

- \$230K revenue shortfall in this quarter
- Inventory 15% surplus (renewable products and recycled i
- Account leads to propose discounting scenarios to lower i
- Proseware was discussed as a leading opportunity

Notes

- Beth emphasized importance of Proseware negotiation st with offers - this is a must win deal.
- The team identified a new opportunity with Proseware th

Copilot in Excel



Formulas: Writing, explaining, and asking questions

Create a column that shows the revenue in USD. Look up the exchange rates in the exchange rate to USD column.

Looking at A1:F51, here's 1 formula column to review and insert in Column G:

Revenue in USD

Converts the revenue from various currencies to USD by multiplying the revenue by the corresponding exchange rate found in the currency exchange rates table (Table1) based on the currency code.

```
fx
=[@Revenue] * XLOOKUP([@[Currency code]],
Table1[Currency Code], Table1[Exchange Rate to
USD])
Show explanation
```

	G
1	Revenue in USD
2	8,304,442.00
3	11,190,935.00
4	13,837,195.00
5	9,560,385.00
...	...

AI-generated content may be incorrect



How can I write a formula to forecast revenue over time?

To forecast revenue over time, you can use the FORECAST function or the FORECAST.ETS function in Excel. Here's a high-level approach:

- 1. Collect Historical Data:** Ensure you have historical revenue data over time.
- 2. Choose a Forecasting Method:** Use either linear forecasting (FORECAST) or exponential smoothing (FORECAST.ETS).

Using FORECAST for Linear Forecasting

If you have a linear trend in your data, you can use the FORECAST function.

```
fx
=FORECAST(new_date, Table7[Revenue], Table7[Date])
```

Using FORECAST.ETS for Exponential Smoothing

If your data has seasonality or a non-linear trend, use the FORECAST.ETS function.

```
fx
=FORECAST.ETS(new_date, Table7[Revenue],
Table7[Date])
```

Replace new_date with the date for which you want to forecast the revenue.

AI-generated content may be incorrect



What does this formula do: =[@[Engaged Users]]/[@[Total Users Targeted]]

This formula calculates the engagement rate for each row in a table.

- It divides the value in the "Engaged Users" column by the value in the "Total Users Targeted" column for the current row.
- The result is the proportion of engaged users out of the total users targeted.

AI-generated content may be incorrect



How would I write a formula to split a column with comma separated values into separate columns?

You can use the TEXTSPLIT function to split a column with comma-separated values into separate columns. Here's an example:

Assume you have comma-separated values in cell A1, like "Apple, Banana, Cherry".

```
fx
=TEXTSPLIT(A1, ",")
```

This formula will split the values in cell A1 into separate columns. If you drag this formula down, it will apply to other cells in column A as well.

AI-generated content may be incorrect



Analyze and visualize your data

Summarize the reviews - what are the top 3 opportunities for improvement?

Here's a summary of column "Customer reviews":

- **Positive Feedback on Charger Performance:** Many users praised the charger for its reliability, efficiency, and quick charging times. It has been a valuable addition to various fleets, including rental cars, delivery vans, and mobile repair vans. Users appreciate its ease of use and the positive impact on their business operations.
- **Mixed Reviews on Customer Support:** While some users reported excellent customer support, others experienced poor service. Issues included unresponsive support teams and inadequate assistance with technical problems. This inconsistency in customer support has been a significant concern for some users.
- **Installation Challenges:** Several users mentioned difficulties with the installation process. Some had to call in technicians for assistance, while others found the process time-consuming and complicated. These challenges have led to frustration and additional costs for some users.
- **Opportunities for Improvement:** 1. Enhance Customer Support: Address the inconsistency in customer support by providing timely and effective assistance to all users. 2. Simplify Installation Process: Make the installation process more user-friendly and provide clear instructions to reduce the need for technical assistance. 3. Improve Charger Reliability: Address issues related to the charger stopping randomly, overheating, and slow charging times to ensure a more consistent and reliable performance.

Copy

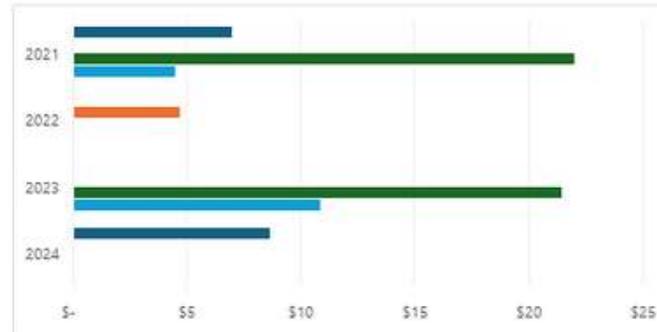
AI-generated content may be incorrect



Create a chart showing revenue by quarter and year

I analyzed data in A2:N14, and here's what I found:

Sum of Revenue (Thousands)



+ Add to a new sheet

AI-generated content may be incorrect



Here's a PivotChart based on your prompt. The revenue by quarter and year is as follows:

- 2021: Q1: \$6,980, Q3: \$22,018, Q4: \$4,540
- 2022: Q2: \$4,732
- 2023: Q3: \$21,507, Q4: \$10,857
- 2024: Q1: \$8,703

See the PivotChart above for more details.

Copy

AI-generated content may be incorrect



Add coloring to show each campaign type in a different color

OK! Looking at A1:K13, here are 3 conditional formatting rules to review and apply:

- **Text contains "Brand marketing":** Apply the following to cells in the column "Campaign Type"
 - Fill color: green
 - Font color: black
- **Text contains "Digital marketing":** Apply the following to cells in the column "Campaign Type"
 - Fill color: red
 - Font color: black
- **Text contains "Targeted - Group 2":** Apply the following to cells in the column "Campaign Type"
 - Fill color: blue
 - Font color: black

AaBbCc

AaBbCc

AaBbCc

✓ Apply

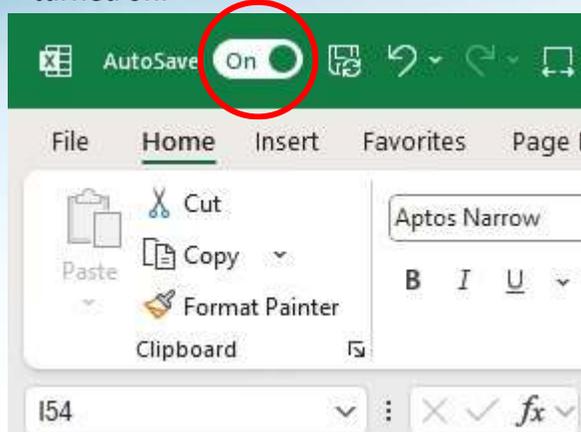
AI-generated content may be incorrect



Getting started

Autosave on

The file must be saved to OneDrive or SharePoint, with Autosave turned on.



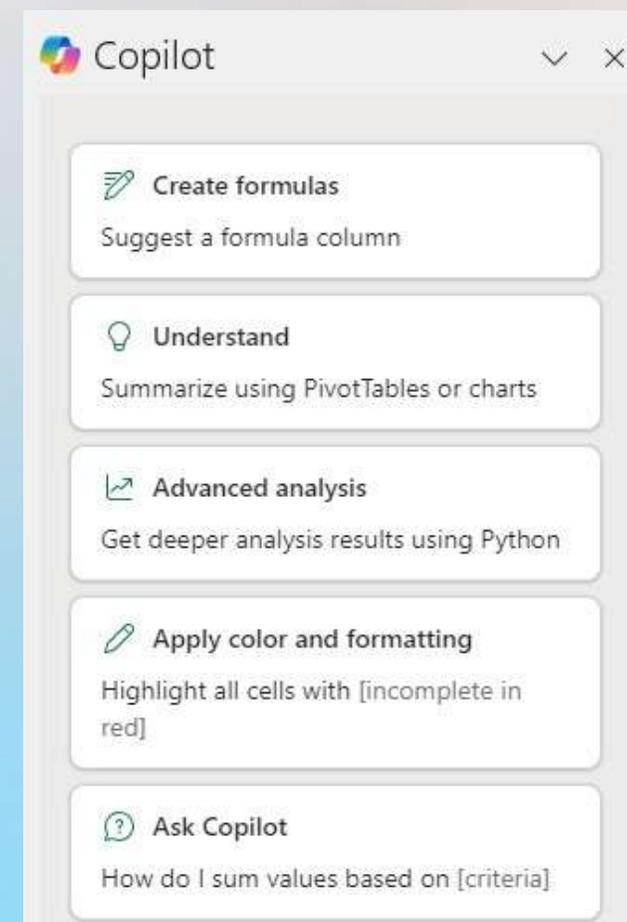
“Table-less” Copilot

Copilot works with data that’s either in an Excel Table (Insert | Table) format, or in a “Table-Like Range” with column headers.

	A	B	C	D
1	Employee ID	Email Address	First name	Last name
2	7192	Juan.Tepaz@contoso.com	Juan	Tepaz
3	4840	Chetana.Hegde@contoso.com	Chetana	Hegde
4	1564	Swarnika.Soni@contoso.com	Swarnika	Soni
5	6619	Carmen.Vella@contoso.com	Carmen	Vella
6	7463	Akhilesh.Khare@contoso.com	Akhilesh	Khare
7	2734	Sigríður.Einarsdóttir@contoso.com	Sigríður	Einarsdóttir
8	8476	Rohini.Vasav@contoso.com	Rohini	Vasav
9	4987	Neha.Benjaree@contoso.com	Neha	Benjaree
10	6307	Jahidi.Juma@contoso.com	Jahidi	Juma
11	6356	Sonu.Jain@contoso.com	Sonu	Jain
12	1527	Sanjay.Puranik@contoso.com	Sanjay	Puranik
13	6161	Shweta.Chourasia@contoso.com	Shweta	Chourasia

Open the chat pane

Click on the Copilot button on the ribbon and try one of the starting prompts or write your own.



Copilot in Word



Copilot in Word

Draft & selections

Reading is easier, too, in the new Reading view. You can collapse sections and focus on the text you want. If you need to stop reading, Copilot remembers where you left off - even on another device.

Write a prompt or select an option below

- Auto rewrite
- Get coaching
- Visualize as a table
- Visualize as a list

Kick start content generation in a formatted and structured way, draft content to insert into an existing document, or select content to elaborate on or update it

Rewrite content

Reading is easier, too, in the new Reading view. You can collapse sections and focus on the text you want. If you need to stop reading, Copilot remembers where you left off - even on another device.

Rewrite with Copilot

The new Reading view simplifies reading by letting you collapse sections of text. If you need to pause, Word saves your spot, even across different devices.

All generated content may be incorrect.

Replace Insert below For example, "Make

Get suggestions for how to rewrite any text

Visualize texts as a tables and lists

New Hire Guide for Sales Company

A comprehensive guide to help you get started in your new role

Task	Deadline	Status
Complete online orientation	Day 1	
Meet your manager and team	Day 1	
Set up your email and phone	Day 1	
Review sales policies and procedures	Day 2	
Attend sales training session	Day 3	
Shadow a senior salesperson	Day 4	
Make your first sales call	Day 5	

Welcome to the Sales Company

Congratulations on joining

Working on it...

Transform content from text format to a table

Document content grounding

Reference a file

- Files
- Contoso construction - Daisy Phillips modified
- Contoso project - Daisy Phillips modified
- Brainstorming document - Daisy Phillips modified
- Contoso Plan - Carole Poland created
- Contoso Meeting - Carole Poland created

Draft with explicit grounding CIQfile support for Word, PPT, PDF, meetings, emails and people (coming soon)

Get coaching

Coaching with Copilot

Your executive summary effectively highlights the key learnings. It provides a clear overview of the progress and areas for improvement. Consider adding more data to support your statements and conclusions.

1. Include Supporting Data

To strengthen your key learnings, include specific data or statistics in engagement or the decline in survey metrics. This will provide a better understanding of the scale and impact of these changes.

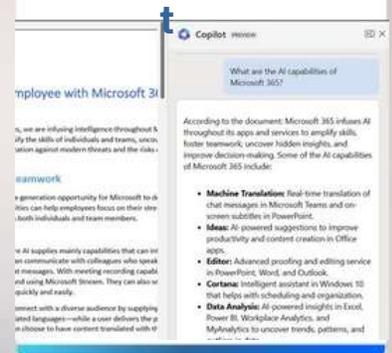
For example

For instance, instead of stating "Engagement also grew," specify that engagement grew by 15% with a daily active user increase from X to Y.

All generated content may be incorrect.

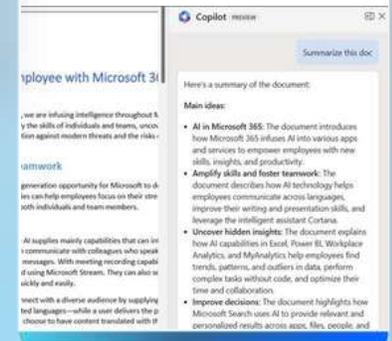
Copilot provides suggestions on high impact ways to improve your writing

Ask questions in Chat



Ask questions about your document, or broader questions from the graph or web

Summarize



Get a summary with key points from your document via chat prompts or above the document.



Copilot in PowerPoint

<https://support.microsoft.com/en-us/copilot-powerpoint>



Copilot in PowerPoint

Create



 Create a presentation

 Ask Copilot

Start from a template with your corporate brand and Create a presentation from a prompt, grounded on a /file (Word / PDF document)

Summarize and Understand

Summarize this presentation

Here's a summary of the presentation based on text and visuals:

Main ideas:

- **LLM LINGUA Overview:** LLM LINGUA, set for MSR January 2024, emphasizes the necessity of publishing papers with accessible code to replicate results easily. ¹
- **Challenges and Solutions:** LLMs face challenges with lengthy prompts, causing high latency and

Summarize this presentation
What are the key slides?

Organize and Edit

Suggestions

 Chat with Copilot

ADVANTAGES OVER COMPETITORS

Superior Performance

The new mountain bike offers superior performance compared to competitors, providing a thrilling and efficient riding experience for outdoor enthusiasts.

Versatility

The new mountain bike is designed for versatility, making it suitable for various terrains and riding styles, catering to the diverse needs of outdoor enthusiasts.

Durability

The new mountain bike boasts exceptional durability, ensuring long-lasting performance and reliability, even in rugged outdoor conditions, setting it apart from competitors.

ADVANTAGES OVER

Superior Performance

The new mountain bike offers superior performance compared to competitors, providing a thrilling and efficient riding experience for outdoor enthusiasts.

Versatility

The new mountain bike is designed for versatility, making it suitable for various terrains and riding styles, catering to the diverse needs of outdoor enthusiasts.

Have Copilot organize my presentation
Quickly change an image Use Designer to update a slide layout.

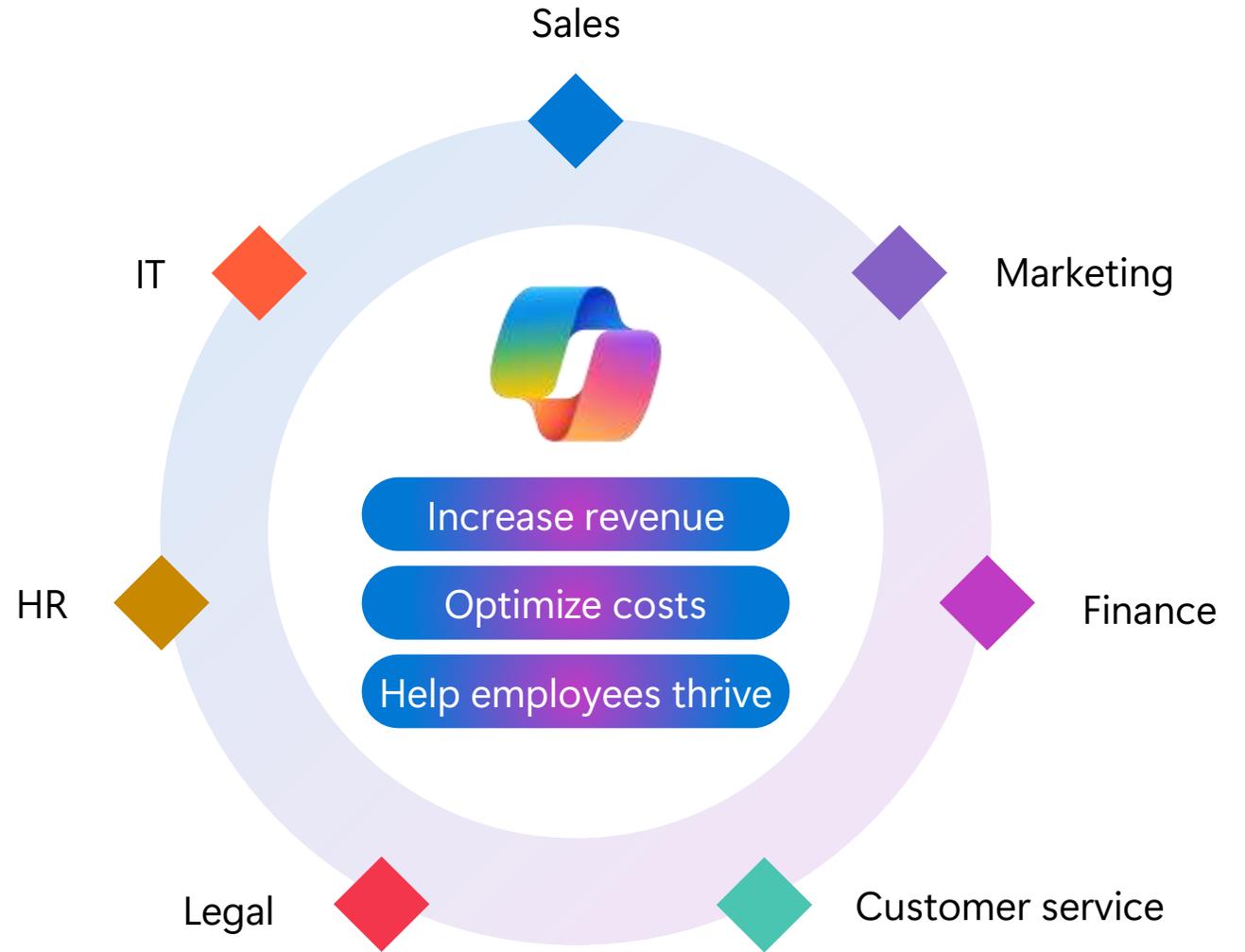
What do AI power users do differently?

They are more likely do frequently...

- book their day with AI—using it to start their day and get ready for the next one
- experiment with different ways of using AI
- redesign workflows and processes with AI

- use AI to analyze information
- to interact with customers
- design visual content
- brainstorm or problem-solve with AI
- keep trying if they don't get the perfect response

Where do I start?



Next steps to accelerate your journey

3 Essentials for Copilot Success



Leadership

Develop leadership capabilities to leverage AI for business outcomes

- ✓ Executive sponsorship
- ✓ Align AI to business strategy
- ✓ Providing clarity and prioritization



Human change

Manage the human transformation with robust user enablement programs

- ✓ User enablement program
- ✓ Communications and community
- ✓ Skilling and training
- ✓ **Best practice:** Measure the impact through feedback and analytics



Technical readiness

Build and iterate technical skills to deliver on business results

- ✓ Secure your data infrastructure
- ✓ Risk management
- ✓ Technical skilling

How to prepare for Copilot for Microsoft 365



Pick the Quick Wins

Start with the areas where you expect the highest ROI and the quick wins to demonstrate impact.

Ensure you have multiple users, ideally an entire department using Copilot as part of any initial pilot.



Create a Community

Create a Copilot Community and nurture to ensure regular engagement with them.

Use Champions to keep sharing learnings and to support in embedding the use of Copilot.



Drive Skilling

Use the resources available to upskill your users to make the most of Copilot for their role.

Look at role specific enablement to ensure they're aligning the impact to their work.



Build the AI Habit

Drive continuous usage through your teams through ongoing enablement.

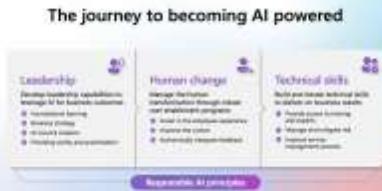
Don't be alarmed if usage drops after one month – that is users moving from testing to embedding.

Copilot Success Kit



What's included

Implementation summary guide



PowerPoint

Copilot adoption guide for business leaders



eBook

User enablement guide



PowerPoint

Technical readiness guide



PowerPoint

Accelerate your path with Microsoft Viva



PowerPoint

<https://aka.ms/CopilotSuccessKit>

Microsoft's new European digital commitments

- 1 We will help build a broad AI and cloud ecosystem across Europe.
- 2 We will uphold Europe's digital resilience even when there is geopolitical volatility.
- 3 We will continue to protect the privacy of European data.
- 4 We will always help protect and defend Europe's cybersecurity.
- 5 We will help strengthen Europe's economic competitiveness, including for open source.

Microsoft Sovereign Cloud

Most comprehensive set of sovereignty solutions,
with integrated productivity, security and cloud platform

Sovereign Public Cloud

Data stays in Europe,
under European law

Data Guardian: operations and
access controlled by Europeans

Sovereign controls for
policy enforcement

Applies to existing Europe cloud
datacenter regions with no migration

Sovereign Private Cloud

Azure Local + Microsoft 365 Local:
integrated cloud and productivity

Hybrid or disconnected
at your location

Validated architecture
and partner ecosystem

Virtualization services

National Partner Clouds

For government and
critical infrastructure criteria

Government approved local operator
independent from Microsoft

Clouds in Germany (Delos Cloud) and
France (Bleu) with local ownership
and isolated infrastructure

← Consistent management and development platform →

Sovereign Public Cloud

Ensures that customer data remains within specific geographic regions under local laws and control. The model integrates services like Microsoft Azure, Microsoft 365, and Power Platform, with control over data fully managed by customers.

Sovereign Private Cloud

Designed for scenarios requiring additional sovereign controls, this solution integrates Microsoft Azure Local and Microsoft 365 Local. It allows an organisation to run workloads in its own data centres, ensuring full control over security, compliance, and governance.

National Partner Clouds

These are independently operated clouds tailored to meet specific national requirements. For example, Bleu in France complies with SecNumCloud standards, while Delos Cloud in Germany meets German government regulations.





Business continuity

Scenario:
Business continuity of cloud services for cloud workloads in the event of natural or geopolitical disasters

Solution

Microsoft delivers resilience through redundant regions, availability zones, and disaster recovery across Azure and Microsoft 365.

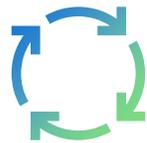
Our hybrid and adaptive cloud capabilities support multi-cloud, partner-hosted and on-premises operation of cloud services.

With our legally binding European Digital Resilience Commitment, we contest orders to suspend or cease operations in Europe.

Sovereign Private Cloud offers hybrid and fully disconnected with Azure Local and Microsoft 365 Local to keep sensitive workloads under local control.

Introducing **Azure Local**

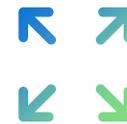
Cloud infrastructure for distributed locations, enabled by Azure Arc



Operate and scale with the power of the cloud



Ready for all your apps: VMs and containers alike



Flexibility to meet your requirements and budget



Extend cloud security to your distributed locations

Azure Local frequently asked questions

How is Azure Local related to Azure Arc?

Azure Arc is a bridge that extends Azure to existing environments and other clouds. Azure Local is an infrastructure solution that includes all the capabilities of Azure Arc built-in and set up automatically. Use Azure Local when you need new or refreshed infrastructure at distributed locations. Use Azure Arc when your environment already has infrastructure.

What happens to Azure Stack HCI?

Azure Stack HCI is now part of Azure Local. The same features and functionality continue to be offered under the new name. There is no action required for existing customers. Compared to before, Azure Local provides additional flexibility and features: it supports lower-spec hardware (preview), disconnected operations (preview), additional services, and more.

What happens to Azure Stack Hub and Azure Stack Edge?

Microsoft recommends Azure Local for most situations where infrastructure is needed at distributed locations. Once lower-spec hardware (preview) and disconnected operations (preview) are generally available, Azure Local will offer the same capabilities as prior Azure Stack products. Until then, there is no change to Azure Stack Hub and Azure Stack Edge: they remain available as standalone products, separate from Azure Local.

Is Azure Local managed by Microsoft?

No, you own the hardware and have operational control of your Azure Local environment. Day-to-day monitoring, management, support, and other functions are surfaced through Azure tools, but actions are customer-initiated. For example, when a software update is available, a notification appears in the Azure portal, but you control when it gets applied.

Is Azure Local a replacement for VMware?

Azure Local is not designed to replace datacenters or support large-scale migrations from VMware. For most VMware migrations, Microsoft recommends using Azure VMware Solution, which offers the fastest and easiest path to the cloud, allowing IT administrators to leverage their existing VMware skills and subscriptions.

Azure Local can be an option for certain durably on-premises use cases, particularly for edge solutions in industries such as manufacturing and retail where customers have many distributed locations. Azure Local uses the Hyper-V hypervisor to run VMs and Azure Kubernetes Service enabled by Azure Arc to run container applications. This makes it a viable solution for customers with on-premises VMware workloads in the scenarios above who also want to move away from VMware licensing.

How do I buy Azure Local?

Review networking and other prerequisites and then browse the solutions catalog to find validated hardware from your preferred vendor. Many solutions come with the Azure Local software preinstalled and ready to use. If not, you can download and install Azure Local software from the Azure portal. Once installed, Azure Local connects to Azure for day-to-day management. Azure Local is billed automatically to your Azure subscription – see pricing for details.

Learn more: aka.ms/AzureLocal





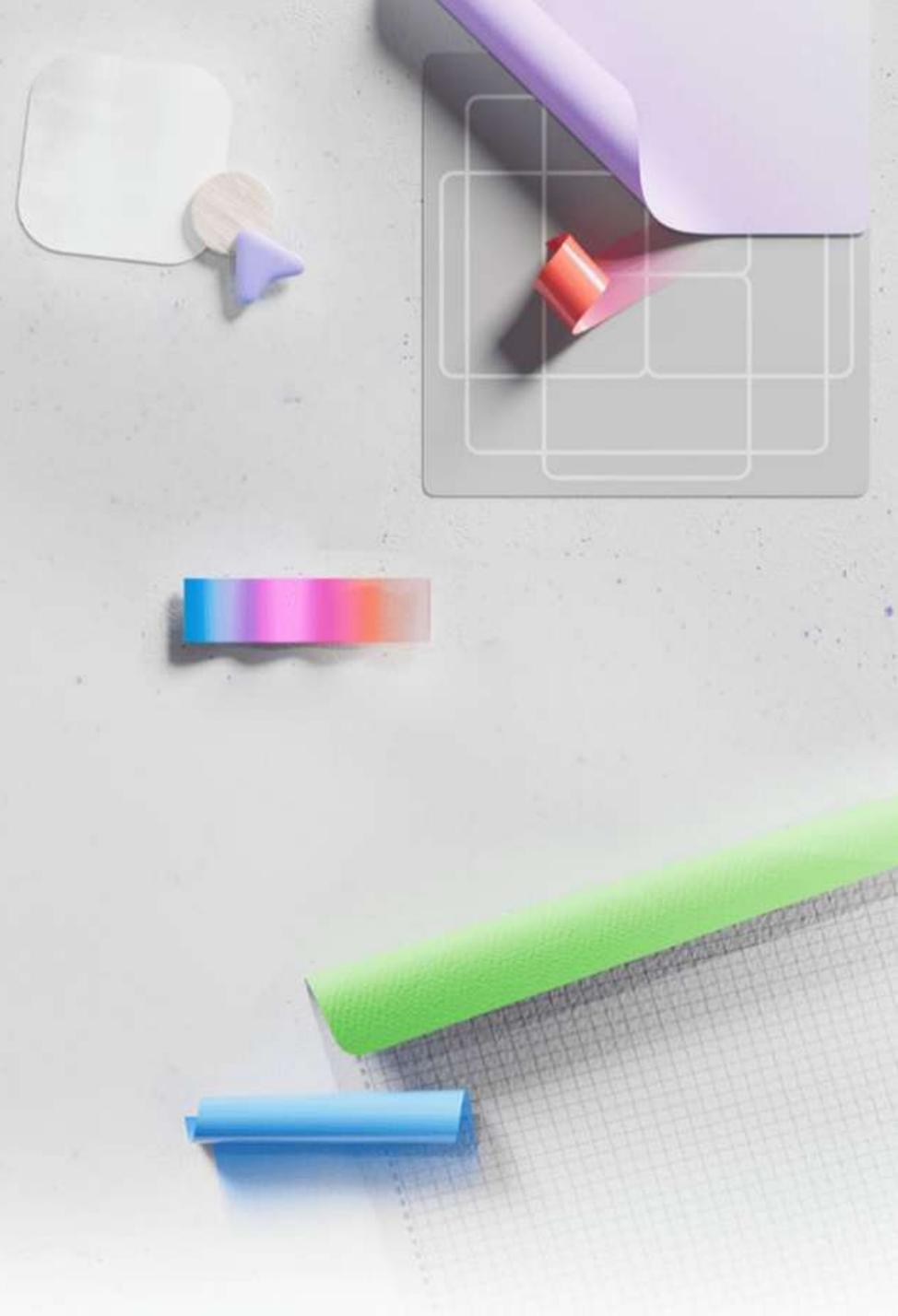
Tānan

Raido Orumets
Arrow ECS Baltics
raido.orumets@arrow.com
+372 53330144

The Arrow logo, featuring the word "ARROW" in a stylized, bold, sans-serif font. The logo is positioned in the top right corner of the image, above a grid pattern. The background of the entire image is a light gray surface with various office supplies like sticky notes, a ruler, and a pen, creating a workspace aesthetic.



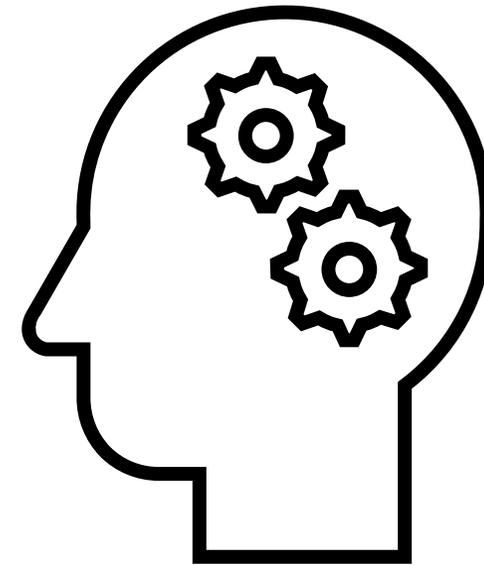
 Microsoft 365 Copilot
Abislaiddid



What is Artificial Intelligence?

Software that imitates human capabilities

- Predicting outcomes and recognizing patterns based on historic data.
- Recognizing abnormal events and making decisions.
- Interpreting visual input.
- Understanding language and engaging in conversations.
- Extracting information from sources to gain knowledge.



Common AI workloads

	Machine Learning	Predictive models based on data and statistics – the foundation for AI.
	Computer Vision	Capabilities within AI to interpret the world visually through cameras, video, and images.
	Natural Language Processing	Capabilities within AI for a computer to interpret written or spoken language and respond appropriately.
	Document Intelligence	Capabilities within AI that deal with managing, processing, and using high volumes of data found in forms and documents.
	Knowledge Mining	Capabilities within AI to extract information from large volumes of often unstructured data to create a searchable knowledge store.
	Generative AI	Capabilities within AI that create original content in a variety of formats including natural language, image, code, and more.

Types of machine learning

Machine Learning

Supervised machine learning

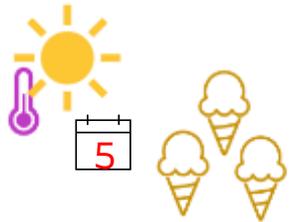
Training data includes known labels

Unsupervised machine learning

Training data is unlabeled

Regression

Label is a numeric value



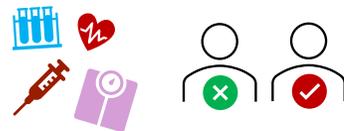
Predict the number of ice creams sold based on day, season, and weather

Classification

Label is a categorization (or *class*)

Binary classification

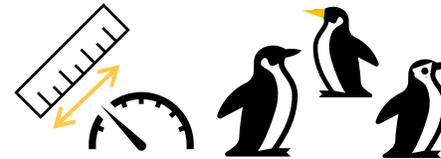
Label *is* or *is not* a class



Predict whether a patient is at-risk for diabetes based on clinical data

Multiclass classification

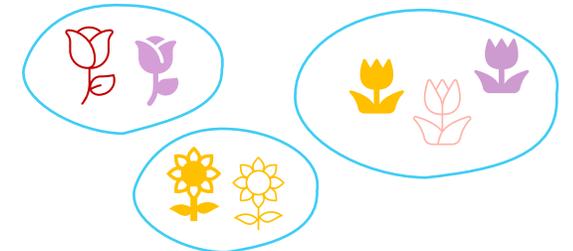
Label is one of multiple classes



Predict the species of a penguin based on its measurements

Clustering

Similar items are grouped together



Separate plants into groups based on common characteristics

Large language models

Generative AI applications are powered by *large language models* (LLMs), which are a specialized type of machine learning model that you can use to perform natural language processing (NLP) tasks, including:

- Determining *sentiment* or otherwise classifying natural language text.
- Summarizing text.
- Comparing multiple text sources for semantic similarity.
- Generating new natural language.

What is generative AI?

AI: imitates human behavior by using machine learning to interact with the environment and execute tasks without explicit directions on what to output.

Generative AI: creates original content, such as generative AI that has been built into chat applications. Generative AI applications take in natural language input, and return appropriate responses in a variety of formats:



Natural language generation



Image generation



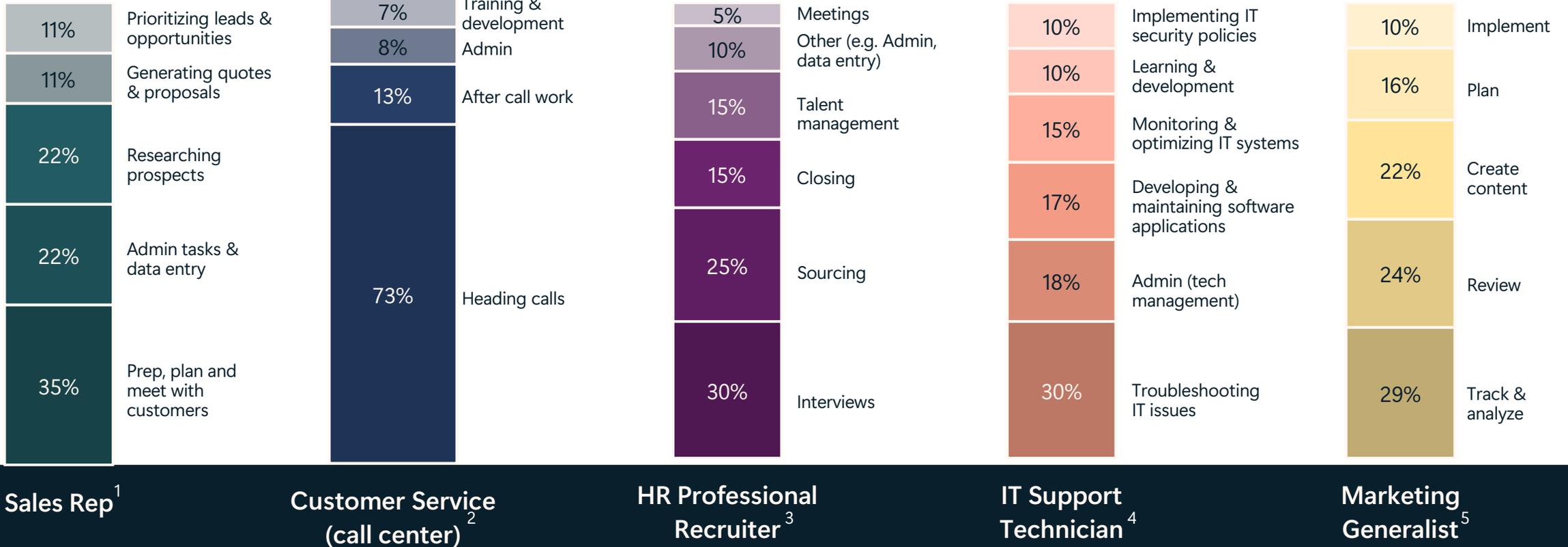
Code generation

Principles of responsible AI

	Challenge or Risk	Example
 Fairness	Bias can affect results.	A loan-approval model discriminates by gender due to bias in the data with which it was trained.
 Reliability & safety	Errors may cause harm.	An autonomous vehicle experiences a system failure and causes a collision.
 Privacy & security	Private data could be exposed.	A medical diagnostic bot is trained using sensitive patient data, which is stored insecurely.
 Inclusiveness	Solutions may not work for everyone.	A predictive app provides no audio output for visually impaired users.
 Transparency	Users must trust a complex system.	An AI-based financial tool makes investment recommendations – what are they based on?
 Accountability	Who's liable for AI-driven decisions?	An innocent person is convicted of a crime based on evidence from facial recognition – who's responsible?

AI transformation opportunities

Understanding where people in different roles focus their time



1. Source: Salesforce 2022 State of Sales report; IDC 2022 customers relationship management applications market share

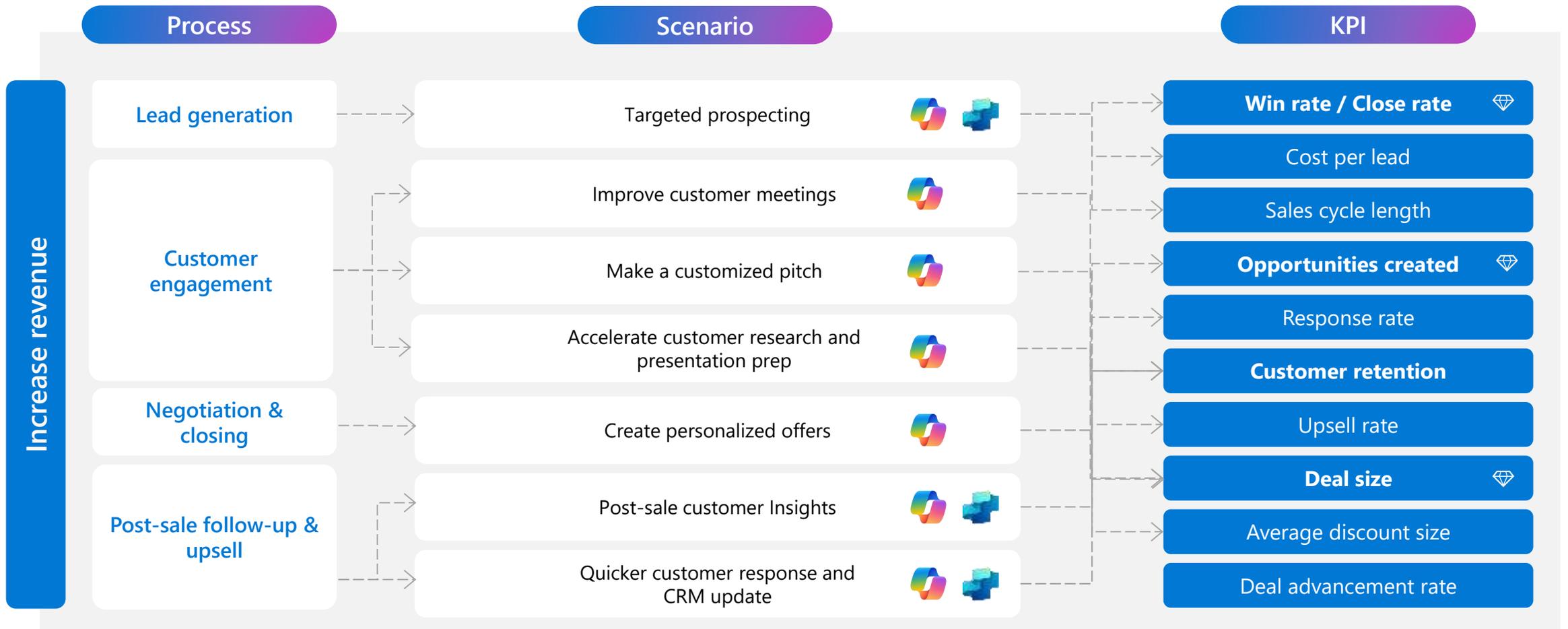
2. Source: call center leader interviews (N=3); Call Center Industry Operational Benchmarking Data and the Impact on FCR SQM Group, May 2021; IDC 2022 Contact Center Applications

3. Source: Recruiting expert interview (N=1), lit search; Gartner 2022 human capital management software market share; Talent Intelligence Tool Market New Research Insight Report 2023

4. Source: IT professionals expert interviews (N=3); IDC 2021 IT service management market share

5. Source: MSFT Marketing team research; Gartner 2022 CRM Marketing software providers market share

Business value in Sales



 = Copilot for M365 & Business Copilots
 = Copilot Studio

 = KPI's included in the BCB

Copilot for Microsoft 365 key differentiators



**Enterprise
Grade Security**

**Integrated in the
Microsoft 365 Apps**

**Productivity data
and signals**

Microsoft Graph

Customizable

Copilot Studio extensions,
OOB plug-ins, role-based
Copilots

**Adoption
and Skilling**

Copilot Lab, Scenario library,
Learning Academy

Measurable Impact

Copilot Dashboard

Azure Local

Cloud infrastructure for distributed
locations, enabled by Azure Arc

Durable scenarios for distributed infrastructure



**Local AI inferencing,
especially video**

Process data at the source

Example: Retail



**Mission critical and
near real-time**

Continuity and low latency

Example: Manufacturing



**Regulated and limited
connectivity**

Keep data and control local

Example: Utilities

Adaptive cloud approach enabled by Azure Arc

Cloud services
and tools



Operate with AI-enhanced central **management & security**



Develop and scale **applications** across boundaries



Unify **data and AI** across a distributed estate

Global
infrastructure



60+ Azure regions

Azure Local

NEW

Existing infrastructure

Introducing **Azure Local**

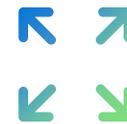
Cloud infrastructure for distributed locations, enabled by Azure Arc



Operate and scale with the power of the cloud



Ready for all your apps: VMs and containers alike

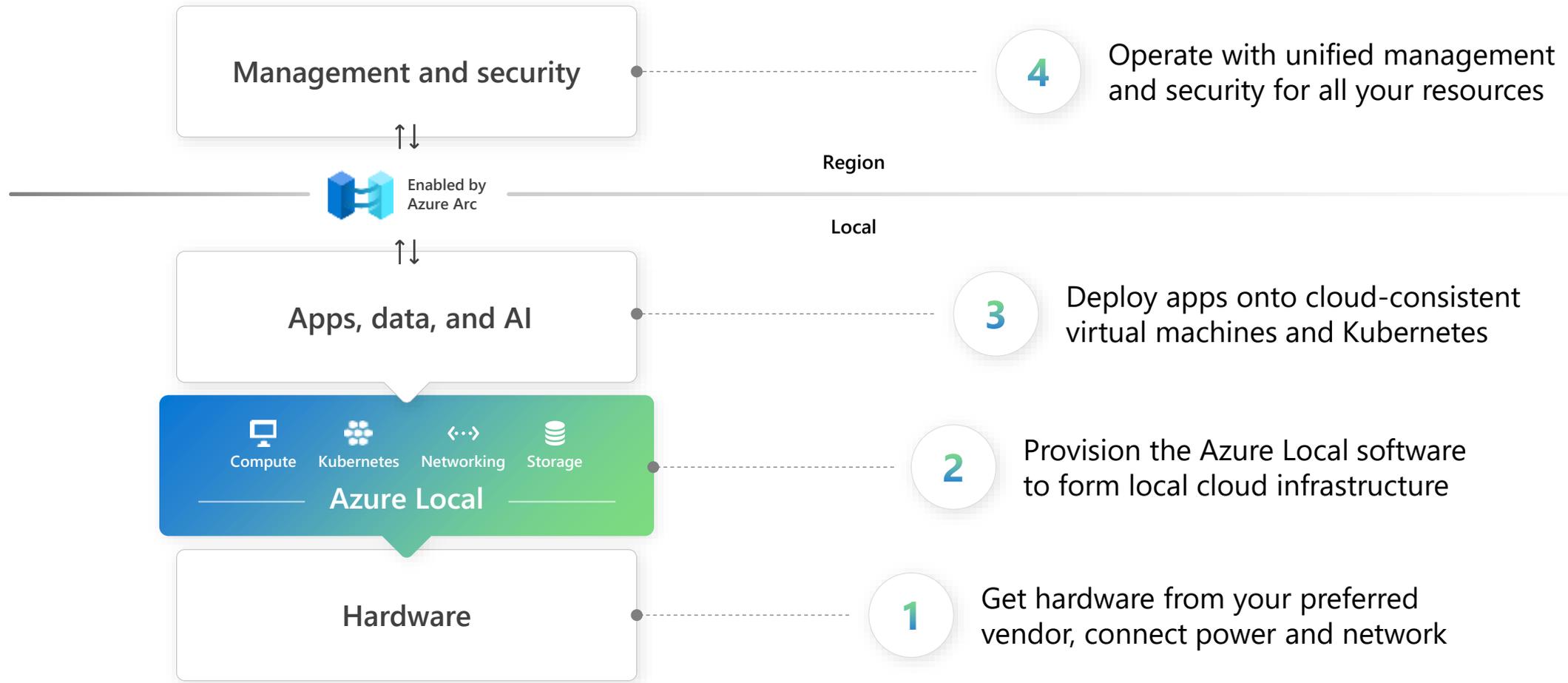


Flexibility to meet your requirements and budget



Extend cloud security to your distributed locations

How Azure Local works (connected)



Azure Local replaces Azure Stack HCI



Consistent software platform, Portal, and APIs



Low-spec, low-cost edge servers

Simpler, smaller hardware for light computing requirements.

NEW PREVIEW



Connected servers (formerly Azure Stack HCI)

Choose from over 100 hyperconverged server platforms from major OEMs.

✓ GA



Disconnected operations

Meet strict data residency regulations with a permanently disconnected option.

NEW PREVIEW

Existing customers of Azure Stack HCI will transition seamlessly to Azure Local with the next software update.



Outline

Operate and scale with the power of the cloud

- Deploy from the cloud
- Scale with infra-as-code
- One-click updates
- Central visibility

Ready for all your apps: VMs and containers alike

- Full-featured, general-purpose VMs
- Migrate from VMware (preview)
- AKS built-in and included
- App, data, and AI services (preview)

Flexibility to meet your requirements and budget

- Choose your hardware
- Accelerate with GPUs
- Low-spec, low-cost options
- Disconnected operations (preview)

Extend cloud security to your distributed locations

- Secure by default
- Microsoft Defender for Cloud
- Network security groups
- Trusted launch



Azure Local

Enabled by Azure Arc

Operate and scale
with the power of
the cloud

Deploy distributed infrastructure from the cloud



Shift responsibility from on-site to central IT



Treat physical machines like cloud resources, using Azure portal, APIs, or even Terraform



Simple wizard, backed by powerful automation

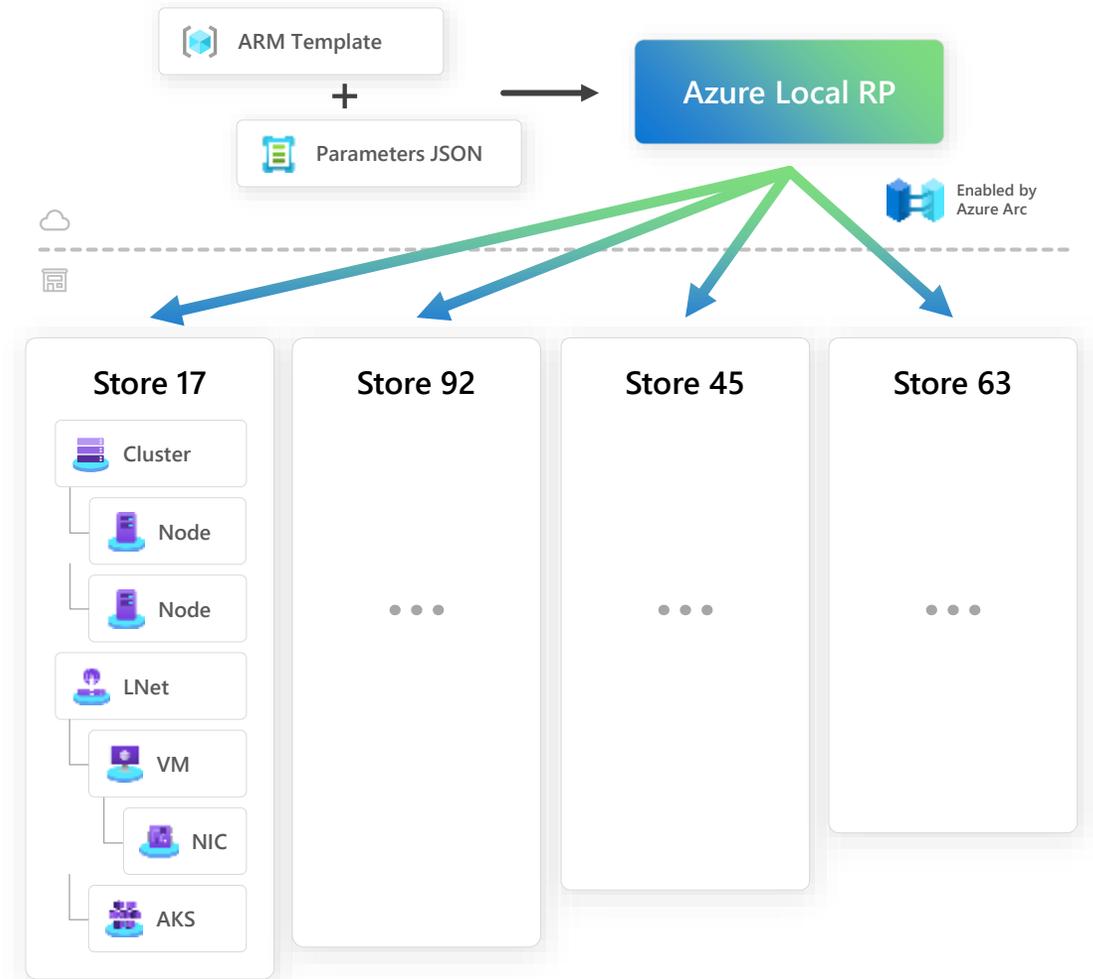


Advanced options to customize the cluster, networking, and storage for your environment

The screenshot displays the 'Deploy Azure Local' wizard in the Microsoft Azure portal. The 'Networking' tab is selected, showing configuration options for the storage network. The wizard is titled 'Deploy Azure Local' and includes a search bar and 'Copilot' icon at the top. The 'Basics' tab shows instance details like 'Instance name' (Contoso-01) and 'Region' (US East US). The 'Networking' tab is currently active, showing a section titled 'Choose whether to use a network switch for the storage network'. There are two radio button options: 'No switch for storage' and 'Network switch for storage' (which is selected). Below this, there are two diagrams illustrating the network adapter configurations. The first diagram shows 'Storage network adapters connect all machines directly', and the second shows 'Storage network adapters connect to a network switch'. Below these diagrams, there is a section titled 'Group network traffic types by intent'. It has three radio button options: 'Group all traffic' (selected), 'Group management and compute traffic', and 'Group compute and storage traffic'. Under 'Group all traffic', there are four intent-based icons: 'Management, compute and storage intent', 'Management and compute intent', 'Storage intent', and 'Management intent', 'Compute and storage intent'. At the bottom of the wizard, there are navigation buttons: 'Review > create', '< Previous', 'Next > Management', and 'Save'.

Repeat and scale with infrastructure-as-code

```
{} Contoso-Store-092.parameters.json X
29 "parameters": {
30   "clusterName": {
31     "value": "Contoso-Store-092"
32   },
33   "useDhcp": {
34     "value": false
35   },
36   "networkingPattern": {
37     "value": "hyperConverged"
38   },
39   "physicalNodesSettings": {
40     "value": [
41       {
42         "name": "Node1",
43         "ipv4Address": "100.156.94.11"
44       },
45       {
46         "name": "Node2",
47         "ipv4Address": "100.156.94.12"
48       },
49       {
50         "name": "Node3",
51         "ipv4Address": "100.156.94.13"
52       }
53     ]
54   },
55   "securityLevel": {
56     "value": "Recommended"
57   },
58   "clusterWitnessStorageAccountName": {
59     "value": "contoso092storageaccount"
60   }
61 }
```



One-click infrastructure updates from the cloud



Conveniently view and manage updates across locations in Azure Update Manager



Full-stack update package includes all Azure Local software plus OEM content ¹



Non-disruptive (workloads keep running)



You control when to apply updates

Microsoft Azure

Home > Azure Update Manager

Azure Update Manager | Azure Local

Refresh | One-time update | Feedback

Filter by name... Subscription == 1 selected Resource group == All Location == All Status == All

Select all	Name	Status	Update readiness	Current version
<input type="checkbox"/>	Contoso-Store-1508	Up to date	Critical	10.2411.0
<input checked="" type="checkbox"/>	Contoso-Store-0695	Update(s) available	Healthy	10.2405.0
<input checked="" type="checkbox"/>	Contoso-Store-2240	Update(s) available	Healthy	10.2405.0
<input checked="" type="checkbox"/>	Contoso-Store-0137	Update(s) available	Healthy	10.2408.2
<input type="checkbox"/>	Contoso-Store-1424	Up to date	Healthy	10.2408.0
<input type="checkbox"/>	Contoso-Store-0869	Up to date	Healthy	10.2411.0
<input type="checkbox"/>	Contoso-Store-0773	Update(s) available	Healthy	10.2405.0
<input type="checkbox"/>	Contoso-Store-0774	Update(s) available	Healthy	10.2405.0
<input type="checkbox"/>	Contoso-Store-0781	Up to date	Healthy	10.2408.1
<input type="checkbox"/>	Contoso-Store-0546	Update(s) available	Healthy	10.2405.0

Showing 1 - 10 of 10 results.

¹ : Firmware and driver packages available for Premier solutions like Dell APEX Cloud Platform and Lenovo ThinkAgile MX455 V3

Central visibility across all your locations



Monitor infrastructure, VMs, and Kubernetes from the Azure portal, enabled by Azure Arc



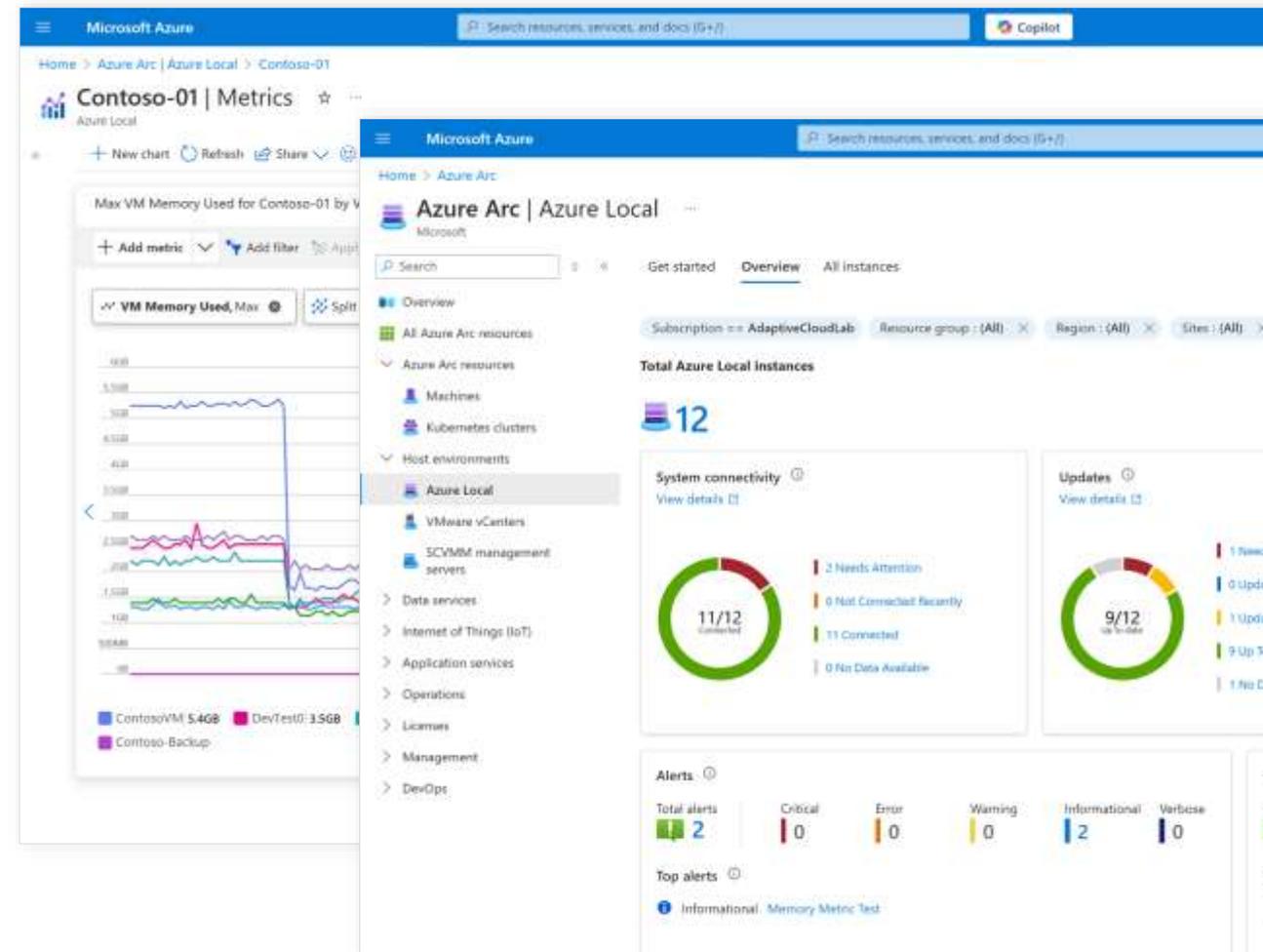
Ready-made dashboards you can customize



50+ standard metrics for infrastructure cover hypervisor, storage, and networking



Set alert rules to send email and more





Azure Local

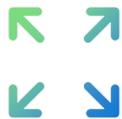
Enabled by Azure Arc

Ready for all your
apps: VMs and
containers alike

Full-featured, general-purpose virtual machines



Run traditional apps in VMs with your own images or Azure Marketplace images



Total flexibility to customize VM specs, networking, storage, and configuration



Use familiar Azure portal and automation for cloud-consistent VM operations



VM extensions for monitoring, security, updates, AD join, custom script, and more

The screenshot displays the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and the Copilot icon. The main content area is titled 'Create an Azure Arc virtual machine' and shows a multi-step wizard with tabs for 'Basics', 'Disks', 'Networking', and 'Tags'. The 'Basics' tab is active, showing 'Instance details' and a list of configuration options such as 'Virtual machine name', 'Custom location', 'Virtual machine kind', 'Security type', 'Storage path', 'Image', 'Virtual processor count', 'Memory (MB)', and 'Memory type'. A 'Next' button is visible at the bottom of the wizard. Overlaid on the right is the 'My-VM' overview page, which displays the VM's name, status (Running), location, subscription, and various properties and capabilities. The 'Properties' section includes fields for Name, Operating system, CPU cores, and Memory. The 'Extensions' section lists several installed extensions, including MDE.Linux, LinuxOsUpdateExtension, LinuxPatchExtension, and AzureMonitorLinuxAgent. The 'Security' section shows the Security type as 'Trusted launch'.

Migrate from VMware to Azure Local (preview)

NEW



Reduce your VMware costs and footprint with full-stack alternative



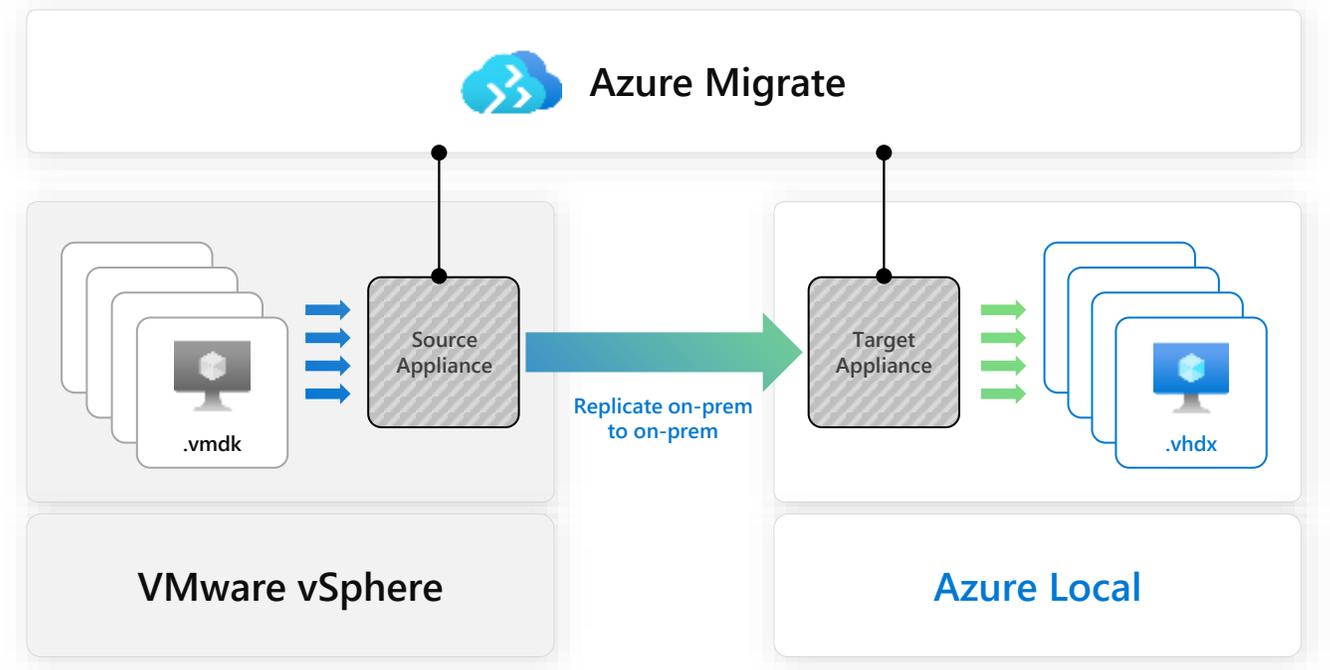
No need to change/rewrite apps



Copy and convert VMware VMDK to Azure Arc VM entirely on-premises



Guided workflow in Azure Migrate



Learn more at aka.ms/AzureLocal/Migrate

NEW

Azure Kubernetes Service built-in and included



Deploy container and cloud-native apps leveraging open-source technology



Managed Kubernetes with AKS-consistent portal and APIs to simplify operations



Microsoft-provided storage (CSI) driver and images for Linux and Windows



Infra-as-code and continuous delivery with Terraform and GitOps support

The screenshot displays the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and the Copilot icon. The main content area is divided into two panels. The left panel shows the 'Create a Kubernetes cluster with Azure Arc' wizard, with tabs for 'Basics', 'Node pools', 'Access', and 'Networking'. The 'Basics' tab is active, showing 'Project details' (Subscription: Contoso, Resource group: Contoso-01), 'Cluster details' (Kubernetes cluster name: My-AKS-Cluster, Custom location: Contoso-01, Kubernetes version: 1.29.9), and 'Primary node pool' (Node size: Standard_A, Node count: 5). The right panel shows the 'My-AKS-Cluster' overview page, with a left-hand navigation menu listing various services like Security, Namespaces, Workloads, and Settings. The main content area on the right displays 'Essentials' information: Subscription (Contoso), Subscription ID (e8af548b-cb71-4663-8cda-a421fa0c7bc9), Resource group (Contoso-01-5G), Status (Connecting), and Location (Contoso-01-East US). Below this, a 'Properties' section lists details for the 'Kubernetes service - Azure Arc', including Agent version (1.29.10), Managed identity certificate (January 5, 2025 at 10:21 AM PST), Kubernetes version (1.29.4), Total node count (5), and Total core count (20).

Bring Azure's app, data, and AI services anywhere

Management services



Portal



Copilot



Graph



Identity



Defender



Monitor



Updates



Policy



Support



Billing

Cloud region

Distributed location



Enabled by
Azure Arc

Popular



Windows and Linux



Azure Virtual Desktop



Azure IoT Operations

App services



App Service



Functions



Logic Apps

Data services



Arc-enabled SQL Server



Managed instance



PostgreSQL

AI services

NEW



Video Indexer



Local AI search (preview)



Machine Learning

Foundational services



Virtual machines



Kubernetes services



Logical networks



Storage paths

Azure Virtual Desktop with Azure Local

The image displays two screenshots of the Microsoft Azure portal. The top screenshot shows the 'Host pools' page for 'Local-Site337', which is highlighted with a green box. The bottom screenshot shows the 'Session hosts' page for 'Local-Site337', displaying a table of session host VMs.

Host Pools Table:

Name	Location	Host pool...	Load bal...	Applicati...
Regional-EastUS	East US	Pooled	Breadth-first	29
Regional-WestEurope	West Europe	Pooled	Depth-first	17
Local-Site337	Custom Location	Pooled	Depth-first	6
Local-Site092	Custom Location	Pooled	Depth-first	1

Session Hosts Table:

Name	Health state	Total sessions	Drain mode	VM Location	Subscription	Agent version
win10multivm1.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win10multivm2.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win11multi05.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win11multi07.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win11multi08.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win11multi09.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win11multi10.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100
win11multi-vm20.poc01.local	Available	10	Off	-	AdaptiveCloudLab	1.0.10004.2100

Azure AI services with Azure Local (preview)

NEW



Local AI Search

Search on-premises data with small and large language models

Private Preview



Azure ML Catalog

Deploy and manage validated AI models from the cloud

Private Preview

Learn more at aka.ms/AzureLocal/EdgeAI



Azure Local

Enabled by Azure Arc

Flexibility to meet
your requirements
and budget

Choose hardware from your preferred vendor



1

Engage directly with your preferred vendor

2

Customize hardware specs, storage, and networking

3

Purchase 1 to N nodes up-front or as-a-service

Explore solutions at aka.ms/AzureLocalCatalog

Accelerate demanding workloads with GPUs



Over 50 GPU-capable platforms with NVIDIA A2, A16, A40, and others



Dedicate whole GPUs to workloads to maximize AI/ML performance



Partition GPUs to increase density with virtual apps and desktops



VMs with GPU partitioning support **live migration and failover**¹ NEW

The screenshot shows the 'Virtual machine kind' configuration page in the Azure portal. The 'GPU Assignment' section is highlighted with a green border. It includes the following options:

- Add GPU
- Type: GPU partition
- Available partition size: 4GB (selected), 8GB

Other visible configuration options include:

- Security type: Trusted launch
- Storage path: Choose automatically (selected) or Choose manually
- Image: Ubuntu Server 24.04 LTS
- Virtual processor count: 4
- Memory (MB): 8192
- Memory type: Static (selected) or Dynamic

Navigation buttons for 'Previous' and 'Next' are visible at the bottom.

1 : Not yet supported by AKS 2 : GPU assignments in Azure Arc coming Dec 2024

Low-spec, low-cost options for edge use cases

NEW

Azure Stack HCI Requirements at launch	Azure Local ¹ Requirements at launch
Windows Server certified	Windows Server certified
Min. 2+ machines	1+ machine
Min. 4+ disks per machine	1+ SSD per machine ²
Min. 10-Gbps w/RDMA	1 Gbps/2.5 Gbps Ethernet ³
Active Directory required	Doesn't require AD ⁴

 <p>SuperMicro SYS-E302 Fan-less server</p>	 <p>Dell MC-4000r/z + MC-4510c Rugged two-sled chassis</p>
 <p>HPE MicroServer Gen11 Micro tower server</p>	 <p>Lenovo ThinkEdge SE350v2 Half-width, half-depth 1U</p>

Example possible solutions, pending validation

1 : Reduced requirements allowed up to maximum of 3-node cluster 2 : Excludes OS boot disk 3 : Must support Hyper-V virtualization 4 : In preview now, coming 2025

Watch the demo

Deploy AKS using tower
servers and simple ethernet



aka.ms/AzureLocalSFFDemo
(9 mins 39 secs)

NEW

Introducing disconnected operations (preview)



Satisfy regulatory requirements by operating permanently disconnected from the cloud



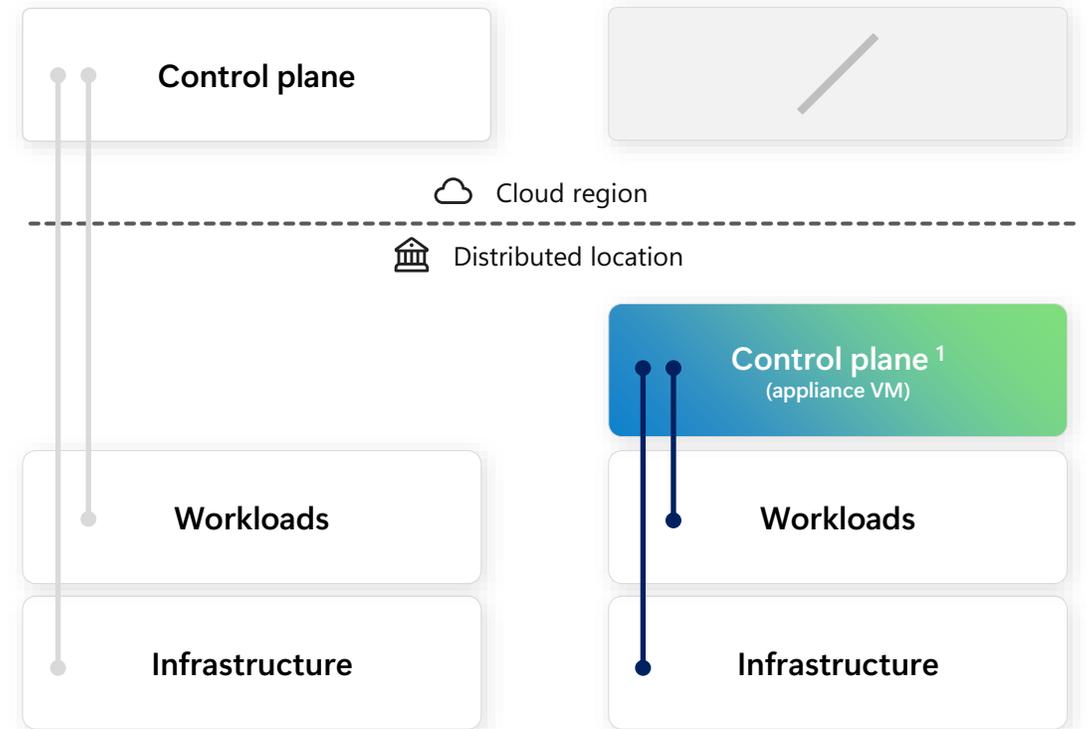
Host backend Azure resource manager, portal, and services in local appliance VM

Subset of services available:

Portal	ARM	Copilot	Key Vaults	Policy ²	Defender
Local	Machines	Kubernetes	Registries	AVD	Others

Azure Local
(connected)

Azure Local
disconnected



1: Available only to customers who prequalify based on industry, use case, and other considerations 2: Partial functionality

Microsoft Azure (fabrikam) x +

https://portal.autonomous.cloud.private/...@autonomous.cloud.private/dashboard/private/a317727b-ab83-415e-b846-d6fa06bcd021

Microsoft Azure (fabrikam) Search resources

My Dashboard **My Dashboard** Private dashboard

+ New dashboard Refresh Full screen Edit Export Clone Delete

Marketplace

Feedback

All resources All subscriptions Refresh

sclusterkvuzk2Inx	Key vault
s-cluster	Azure Local
v-Host1	Machine - Azure Arc
v-Host2	Machine - Azure Arc
v-Host3	Machine - Azure Arc
v-Host4	Machine - Azure Arc

Key vaults Subscriptions Azure Arc Machines - Azure Arc Kubernetes - Azure Arc Tags Resource Explorer Marketplace Container registries

Azure Local with disconnected operations

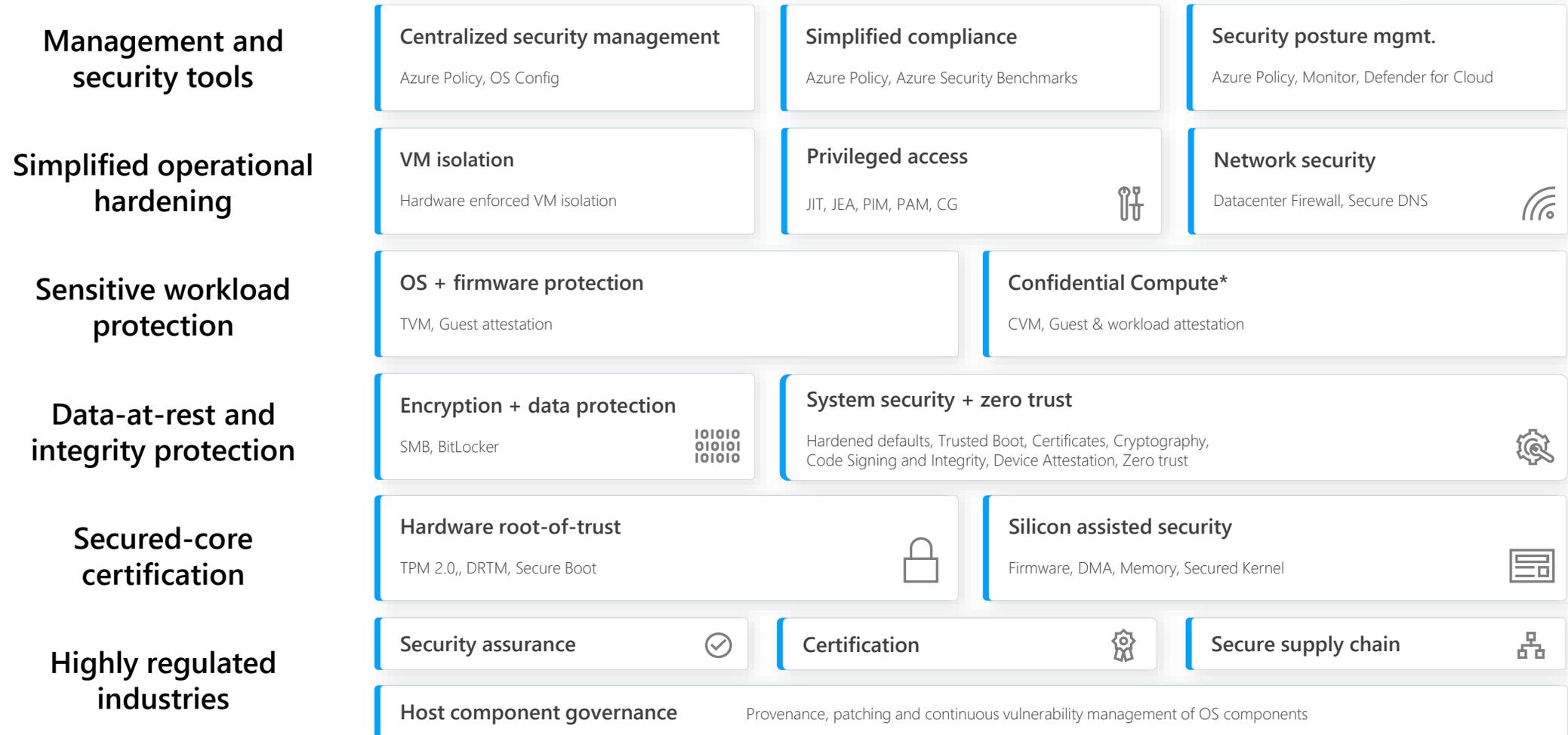


Azure Local

Enabled by Azure Arc

Extend cloud
security to your
distributed locations

Strong **default security** for apps and infrastructure



Home > Microsoft Defender for Cloud

Microsoft Defender for Cloud | Recommendations

Showing subscription 'AdaptiveCloudLab'

Search

Refresh Download CSV report Open query Governance report Guides & Feedback Switch to classic view

General

- Overview
- Getting started
- Recommendations**
- Attack path analysis
- Security alerts
- Inventory
- Cloud Security Explorer
- Workbooks
- Community
- Diagnose and solve problems
- Cloud Security
 - Security posture
 - Regulatory compliance
 - Workload protections
 - Data security
 - Firewall Manager

Search by title / resource

Risk factors == All Risk level == All Resource type == 6 selected

Group by title:

Add filter

Title	Affected resources	Risk factors
Machines should have a vulnerability assessment solution	49/106 resources	
Storage accounts should restrict network access using virtual network rules	47/53 Storage accounts	Exposure to the Internet
Machines should be configured securely (powered by MDVM)	19/21 resources	Exposure to the Internet Vulnerabilities in security configuration on your Linux machines should be remediate...
Diagnostic logs in Key Vault should be enabled	15/29 Key vaults	
Azure Local machines should meet Secured-core requirements	9/11 Azure Local	
Vulnerabilities in security configuration on your Linux machines should be remediate...	6/21 resources	Exposure to the Internet
Non-internet-facing virtual machines should be protected with network security gro...	6/14 Virtual machines	
Immutable (read-only) root filesystem should be enforced for containers	5/11 Kubernetes - Azure Arc	
Guest Attestation extension should be installed on supported Windows virtual machi...	5/5 Virtual machines	
Services should listen on allowed ports only	5/11 Kubernetes - Azure Arc	
Kubernetes clusters should disable automounting API credentials		

Microsoft Defender for Cloud with Azure Local

Network threat landscape: by the numbers

90%+



of all cyberattacks abused
Remote Desktop Protocol
(RDP) in 2023

[Source: Sophos, 2023](#)

3M+



Exposed RDP ports could be
protected with stronger
network security

[Source: Sophos, 2021](#)

Introducing network security groups (preview)

NEW



Protect network access with inbound and outbound allow and deny rules



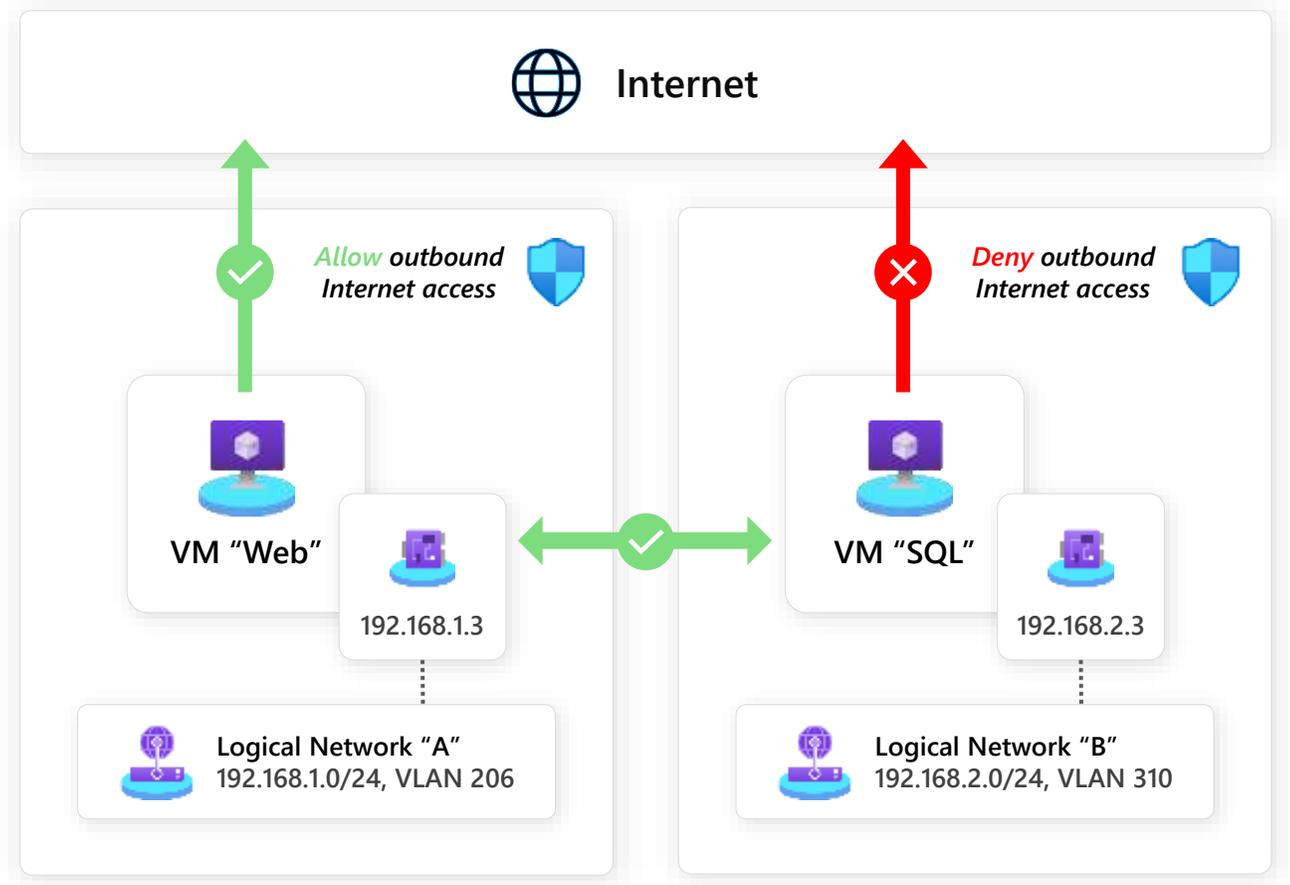
Complete 5-tuple control: source and destination IP, port, and protocol



Assign NSGs to individual VM interfaces or whole logical networks



Enforced within the virtual switch at the virtual port level



NetworkSecurityGroup-01

Azure Local Network Security Group

Search Delete Refresh

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Settings
 - Inbound security rules
 - Outbound security rules
 - VM network interfaces
 - Logical networks
 - Properties
 - Locks
- Automation
 - Tasks
- Help
 - Support + Troubleshooting

Essentials

Resource group : [Contoso-01](#) Security rules : 1 inbound, 0 outbound
Location : East US Associated with : 0 Logical network, 1 VM network interface
Subscription : [AdaptiveCloudLab](#) Custom location : [Contoso-01](#)
Subscription ID : fba508b-cb61-4383-9cda-a42bfa0c7bc9
Tags [\(edit\)](#) : [Add tags](#)

[JSON View](#)

Priority ↑	Name	Provisioning state	Port	Protocol	Source	Destination	Action
Inbound security rules							
300	RDP	✔ Succeeded	3389	Any	Any	Any	✔ Allow
310	SSH	✔ Succeeded	22	Any	Any	Any	✘ Deny
Outbound security rules							
100	ContosoApp	✔ Succeeded	80, 443	TCP	LogicalNetwork	LogicalNetwork	✔ Allow
200	AllowLogs	✔ Succeeded	80, 443	TCP	Any	Internet	✔ Allow
4000	DenyAllOutBound	✔ Succeeded	Any	Any	Any	Any	✘ Deny

Network security groups with Azure Local

Low-level attacks are increasingly sophisticated

Firmware attacks are hard to detect, persistent across reboots

Example

“MoonBounce” (2022)



Description

Rootkit that targets UEFI
Simple Firmware Interface (SFI)

Result

Controls system remotely

Example

“CosmicStrand” (2022)



Description

Targets the (virtual) hardware
initialization components

Result

Data exfiltration
Installs more malware

Example

“BlackLotus” (2023)



Description

Boot kit (UEFI) that
bypasses Secure Boot

Result

Controls system remotely

Introducing Trusted launch for VMs (preview)

NEW



Secure Boot ensures only trusted software can run during boot



Boot Integrity extends the benefits of Secure Boot and identifies vulnerabilities



Microsoft Azure Attestation service regularly verifies TVM components ¹



Keys and secrets persist through VM movements (live migration, failover)

The screenshot displays the Azure portal interface for creating and managing an Azure Arc virtual machine. The main window shows the 'Create an Azure Arc virtual machine' wizard with fields for project details, instance details, and image selection. An overlay window shows the 'VirtualMachine01' overview page, which includes a navigation menu and a 'Security' section. The 'Security' section is highlighted with a green box and contains the following information:

Property	Value
Security type	Trusted launch
Enable Secure Boot	Enabled
Enable vTPM	Enabled
Integrity monitoring	Enabled (last updated 11/20/2024 8:00 AM)

¹ : Attestation visibility in Azure portal coming in Q1 2025.

Watch the demo

Extend cloud security to your distributed locations

Microsoft Azure | Search resources, services, and docs (G+)

Home > Contoso-01 | Microsoft Defender for Cloud >

Recommendations

Refresh | Download CSV report | Open query | Governance report | Guides & Feedback | Recommendations by risk

You may be viewing limited information. To request tenant-wide visibility, click here. →

Secure score recommendations | All recommendations

Secure score: 51% | Active secure score recommendations: 35/77

0 Attacks prevented in your environment. Learn more →

Name	Max score	Current score	Potential score increase	Status	Unhealthy resources	Insights
Encrypt data in transit Host and VM networking should be protected on Azure Local...	4	4.00		Completed	0 of 63 resources	
Enable encryption at rest Azure Local systems should have encrypted volumes	4	0.00	+ 7%	Completed	12 of 22 resources	
Implement security best practices Azure Local machines should meet Secure score requirements	Not scored	Not scored		Completed	61 of 226 resources	
Apply adaptive application control Azure Local machines should have consistently enforced appl...	Not scored	Not scored		Completed	0 of 10 resources	

aka.ms/AzureLocalSecurityDemo
(2 mins 51 secs)



Review

Operate and scale with the power of the cloud

- Deploy from the cloud
- Scale with infra-as-code
- One-click updates
- Central visibility

Ready for all your apps: VMs and containers alike

- Full-featured, general-purpose VMs
- Migrate from VMware (preview)
- AKS built-in and included
- App, data, and AI services (preview)

Flexibility to meet your requirements and budget

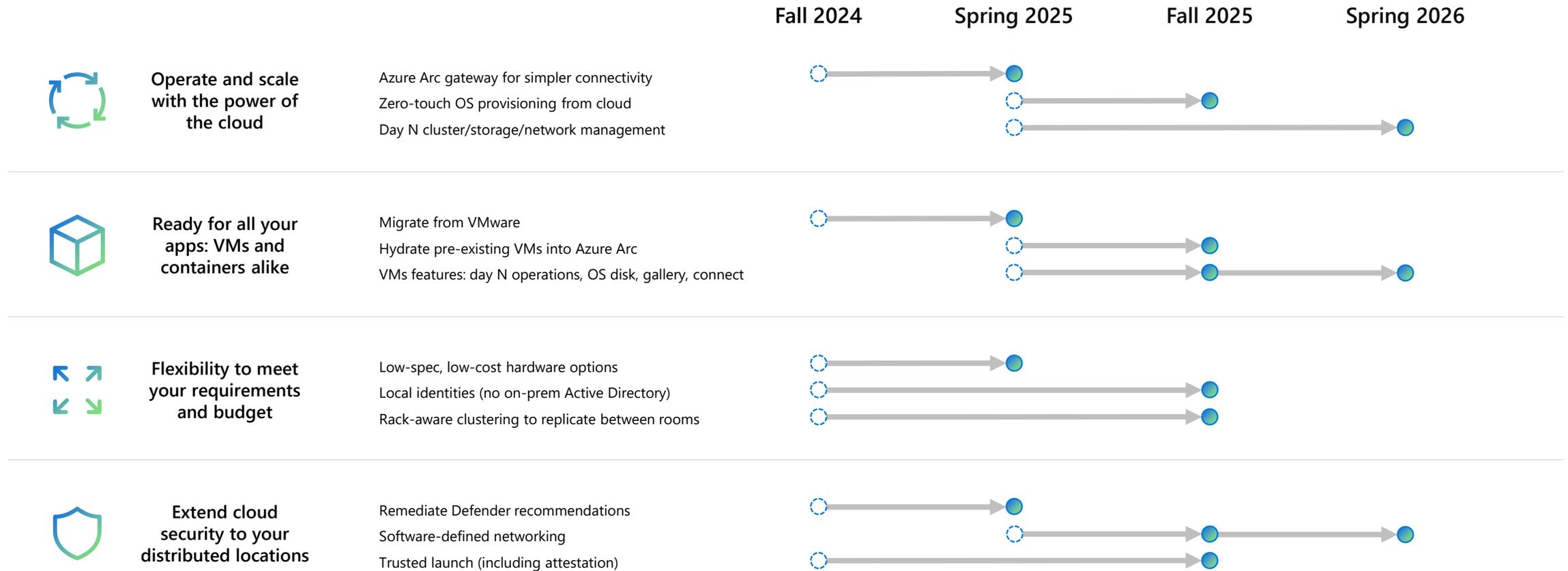
- Choose your hardware
- Accelerate with GPUs
- Low-spec, low-cost options
- Disconnected operations (preview)

Extend cloud security to your distributed locations

- Secure by default
- Microsoft Defender for Cloud
- Network security groups
- Trusted launch

Azure Local (partial) product roadmap *

○ Preview ● GA



* IMPORTANT: Forward-looking roadmap is subject to change. It should not be interpreted as a commitment on the part of Microsoft, and Microsoft cannot guarantee its accuracy.

Azure Local packaging and pricing

Software subscription billed through Azure

Flat monthly fee covers complete infrastructure software stack: compute, networking, storage, Kubernetes, and management

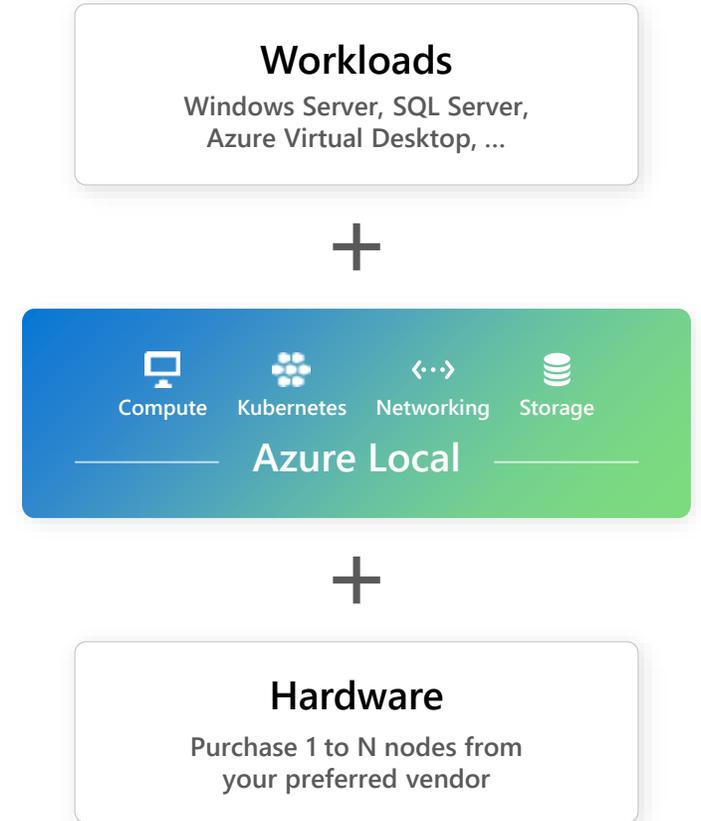
List price 10 USD/physical core/month ¹

Hardware purchased separately from your OEM

Workloads may have their own licensing (e.g., Windows)

Additionally,

- Azure Local is available preinstalled from select partners (OEM license).
- Customers with active Windows Server Datacenter Software Assurance (SA) may exchange their licensed cores for the same number of cores of Azure Local at no additional cost. Please refer to product terms for details.



¹ : Applies to connected machines. Pricing for disconnected operations (preview) has not been announced.

Recognized Leader

2024 Gartner® Magic Quadrant™ for Distributed Hybrid Infrastructure

Read [the blog](#)





Thank you!

Azure Local
Enabled by Azure Arc