### **Session Format (3 hours)**

Agenda	Time
Kickoff	9:00 PT
Scenario overview	9:10 PT
Team breakouts	9:20 – 11:20 PT
Team readouts	11:20 PT
Wrap	11:50 PT

Breakouts end at 11:20 PT

Set a timer in Teams!

### Reminders

- · Decide as a team what you can accomplish with the allotted time
- Do not feel obligated to solve ALL the problems or use cases it might make sense to pick one to solve or combine
- Be creative if there is a critical element of the scenario that is missing – please add it so all can be included

### Agentic method [template]

### Approach:

Lorem ipsum dolore whatever... We started by ideating with agentic help, then put agents in your agents so you could agent while you agent.

### **Insights:**

- Lorem ipsum
- Dolor latin stuff
- Learning is fun

Agentic Toolkit	Notes

Team members: member1, member2, member3

Scenario: Agentic migration and modernization for manufacturing customer



### **Challenge Basics**



**Goal:** Accelerate migrate and modernize with a customer using agentic tools and processes.



**Scenario:** Partner has a large manufacturing customer who has just signed a large MACC, and now seeks assistance from Microsoft to support the migration and modernization of the customer's application portfolio.



**Focus Areas:** Migrate and modernize critical business applications, comprehensive cloud solution architecture, migrate vs modernize rationale, security, future roadmap

### Scenario

#### **ORGANIZATION**

**Industry:** Manufacturing

**Size:** ~5,000 employees across multiple regions

Core Business Systems: Legacy ERP, custom-built CRM, and on-premises data warehouse for operations, custom application portfolio for manufacturing and production systems

**IT Landscape:** Primarily onpremises, fragmented cloud adoption

#### **INFRASTRUCTURE**

#### **Data Centers:**

- Two physical data centers running aging hardware (average age: 7 years).
- Limited redundancy and disaster recovery capabilities.

#### Compute & Storage:

- Virtualized workloads on VMware clusters.
- Storage arrays nearing capacity; scaling requires significant CapEx.

#### **Networking:**

- MPLS-based WAN with high latency for remote offices.
- No SD-WAN or modern network optimization.

#### **APPLICATIONS**

#### **Core Business:**

- ERP system running on Windows Server 2012
- CRM built on .NET Framework 4.5, tightly coupled to SQL Server.
- Company line-of-business and operations apps use Java Spring and PostgreSQL

#### Integration

- Point-to-point integrations; no centralized API strategy
- Java apps use RabbitMQ
- Some legacy SSIS processes for data warehouse

#### Data:

- Large amount of mixed file storage on aging NAS infrastructure
- SQL Server supports CRM and ERP
- PostgreSQL and MariaDB

#### **OPERATIONS**

#### **Observability:**

 Core infrastructure monitoring limited to native tools with no automation

#### **Identity:**

- On-prem Active Directory domain
- Entra ID tenant (existing M365 customer)
- Apps use a mix of legacy user/password and Windows auth (via domain users)

#### Management:

 Legacy custom ticketing system for incident management

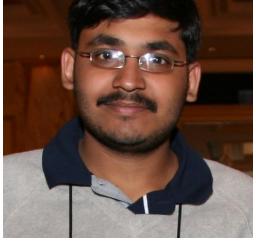
### Voice of the customer

CEO



**CFO** 

**CTO** 



CIO



CSO



- Adopt Al across every aspect of business
- Need to present to the board the Al strategy, as they are concerned about competition pulling ahead
- Worried about IT staff skills and need assurance that they can continue provide value to the organization
- Wants to avoid project sprawl, and ensure existing spend is controlled
- Optimize spend through cloud cost controls and stay on budget
- Stay compliant with corporate policy for financial systems data and access
- Has been using AI tools for years and has personal ChatGPT subscription; doesn't want AI at work to become "just another chatbot"

- Fully sold on cloud and Azure platform, but fighting company inertia and legacy complexity
- Last CTO was fired because of disruption in production during new system rollout
- Wants to use Al to optimize factory processes and safety
- Feels the wealth of sensor and loT data they already have is not put to good use

- Manages portfolio of Java apps with some legacy apps no one remembers how to work on.
- Supports increasing number of apps and databases with the same number of staff
- Relies on aging in-house ticketing system for operations management
- 1 year deadline to retire legacy datacenters
- One system has a technical requirement to stay on-prem and cannot migrate to cloud infra

- A critical vulnerability in one of our apps exposed sensitive customer data and impacted the company's reputation.
- Concern about AI misuse and abuse
- Knows we have software in prod with unpatched CVEs

### Suggested Deliverables

### **Technical presentation**

- PowerPoint or other visual presentation style
- How would you present this to the C Suite?

#### **Architecture Diagram**

• Technical design illustrating how their systems work on Azure

#### Migration Plan

- Process approach and tools used to move customer workloads to Azure
- Estimated timeline and deliverables

#### Code repo

- Example infrastructure-as-code for cloud-based deployment of migrated app
- Sample code or other technical artifacts supporting migration and modernization effort (<u>Spring Petclinic community</u> can be used as a sample repo if desired)

### Contoso Consulting Group (CCG) Al Innovation Challenge

Make time reporting effortless, accurate, and intelligent



### Contoso Consulting Group's Pain Points

- Consultants dislike manual time entry
   often delayed or incomplete
- Missing travel time and misclassified expenses reduce billable accuracy
- Managers spend hours reconciling inconsistent reports
- · Leadership lacks real-time visibility into project utilization
- Compliance issues with client contracts due to data errors



### **Challenge Overview**



Help CCG reimagine the experience of time and expense reporting using Agentic AI principles. Show how AI could proactively assist consultants, even if it is only a conceptual or partial prototype



**Remember:** Your solution should demonstrate Agentic AI behaviors – reasoning, tool use, and proactive assistance



### Choose one focus area (not all):

- 1. Context Awareness: Detect missing travel or time entries
- 2. Proactive Suggestions: Recommend updates based on schedule or behavior
- 3. Conversational Interface: Let consultants log or confirm entries natrually

You only need to build or mock one of these features

### Requirements

Build an Agentic AI Concept Prototype

- Design: Sketch an architecture or flow diagram (PowerPoint, whiteboard, or draw.io)
- Demonstrate:
  - A short script, mock interaction, or working demo that shows your Al flow
  - You can use a local script, Semantic Kernel/Agent Framework sample, or Copilot Studio
- Use Microsoft Al Tools: Include at least one (e.g. Azure Open Al, Semantic Kernel, Azure Cognitive Services, Copilot Studio, etc)
- Present: 3-5 minute walkthrough of your concept



### **Deliverables**

### **Concept Diagram**

- Simple visual showing how your agent or flow would work
- Example: SK + Azure Functions + OpenAl

### **Demo or Script**

- Show a sample conversation or flow (mock or working)
- Example: Console app, Postman, or slide-based simulation

### **README / Summary Slide**

- Which AI tools did you use, and why
- Example: "We used Azure OpenAI for reasoning; Graph for calendar context"

# Contoso Coffee & Tea Al Innovation Challenge



## Contoso Coffee & Tea Current Concerns

- Sales have stagnated despite a strong brand presence.
- Customer engagement and loyalty app usage are declining.
- The mobile experience feels generic and lacks personalization.
- Younger customers expect smarter, more tailored digital interactions.
- Feedback and data are underused, offering little insight into customer behavior.



### Challenge Overview



**Goal:** Help Contoso Coffee & Tea transform its café experience using Aldriven innovation.



**Scenario:** Design a new digital feature for the mobile/web app to boost customer engagement, personalization, and convenience, both in-store and online.



Focus Areas: Creativity, Technical Implementation, Real-world Applicability

### Requirements

- Prototype: Create a new app or feature concept that reimagines how customers interact with a coffee or tea shop, from ordering to personalization.
- Al Integration: Use Al in any creative way (i.e. not a chat bot) that enhances the customer experience.
- Tech Stack: Completely open



### Deliverables

### **Feature Description**

- What problem or opportunity does it address?
- Why is it valuable for customers and the business?

### **Technical Implementation**

• Include an architecture diagram and overview of how Al fits into your design.

#### Demo

• Create a working prototype or short walkthrough that demonstrates your feature in action.

#### **Documentation**

- Explain how the AI component works (data used, limitations, and ethics).
- Describe **which agentic tools** you used to support your ideation or development process.

# **Example Deliverables**

Strategy document or presentation

Wireframes

Proposed design

Solution mapping

Project plan

Architecture

Prototype: UX or app

Demo



### Unlocking transformation by function



**Customer Service** 

Self-help

Support assignment

Issue diagnosis

Problem resolution

Continuous improvement



Sales

Customer self-service

Lead generation

Customer engagement

Negotiations & closing

Post-sale follow-up & upsell

> Sales analysis & forecasting



Finance

Quote to cash

Record to report

Tax & treasury

Planning & analysis

Risk management and compliance

Procure-to-pay



Marketing

Customer insights & strategy

Demand generation

Content creation

Campaign execution

Predictive analysis

Personalization

Sales enablement & recommendation



HR

Employee engagement

Recruiting

HR admin & payroll

Compensation & benefits

Learning & development

Talent management

HR strategy & planning



Legal

Regulatory & compliance management

Contracting

Risk management

Litigation

Consultation

Intellectual property

Advisory services



IT

Software development

Data management

Device management

IT operations

Network operations

Information security

Change management & user adoption

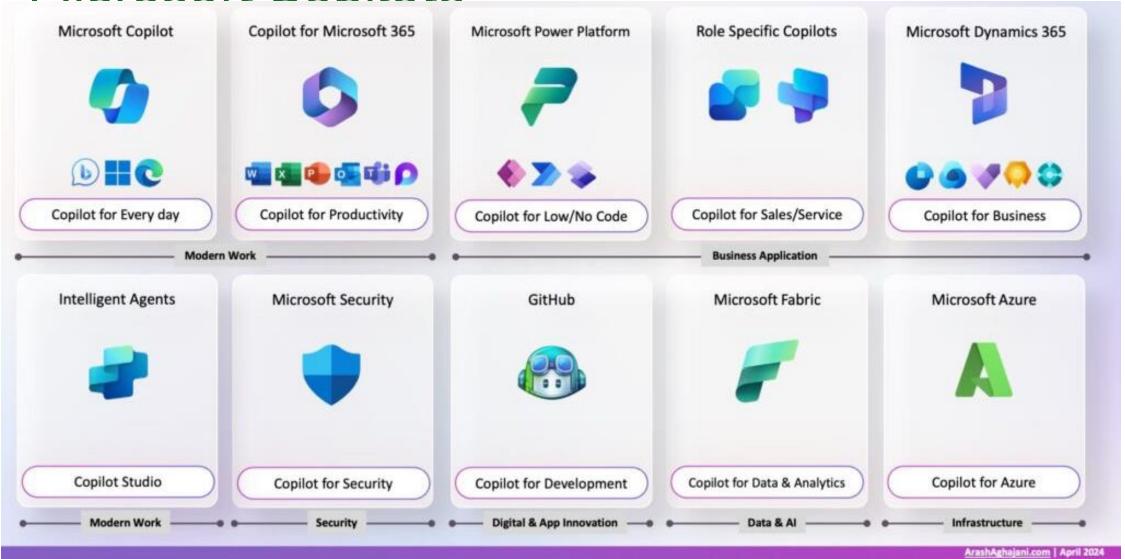
### **Breakouts – Suggested Milestones**

Milestone	Notes	Time
Introductions	Name, expertise and superpowers	5 min
Scenario review and ideation	Review the scenario and ideate on what deliverables you can produce given the time and skillsets on your team. Review as a group <u>or</u> separately then share ideas.	30 min
Planning	Create a plan of attack, deliverables and owners.  Remember to use AI / agents for solution development AND incorporate AI and agentic innovations into those solutions!	10 min
Build!	Start building with AI and agents. Make sure you are checking in frequently as a team.	60 min
Prep for readouts	Bring the team's contributions/deliverables together and ensure you are aligned with the vision you outlined.  Articulate the solution, Al/agents used and learnings to share in the readout.	15 min

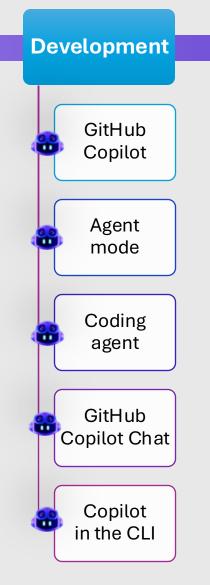
ProTip: Use Copilot to record the session!

Total: 2 hours

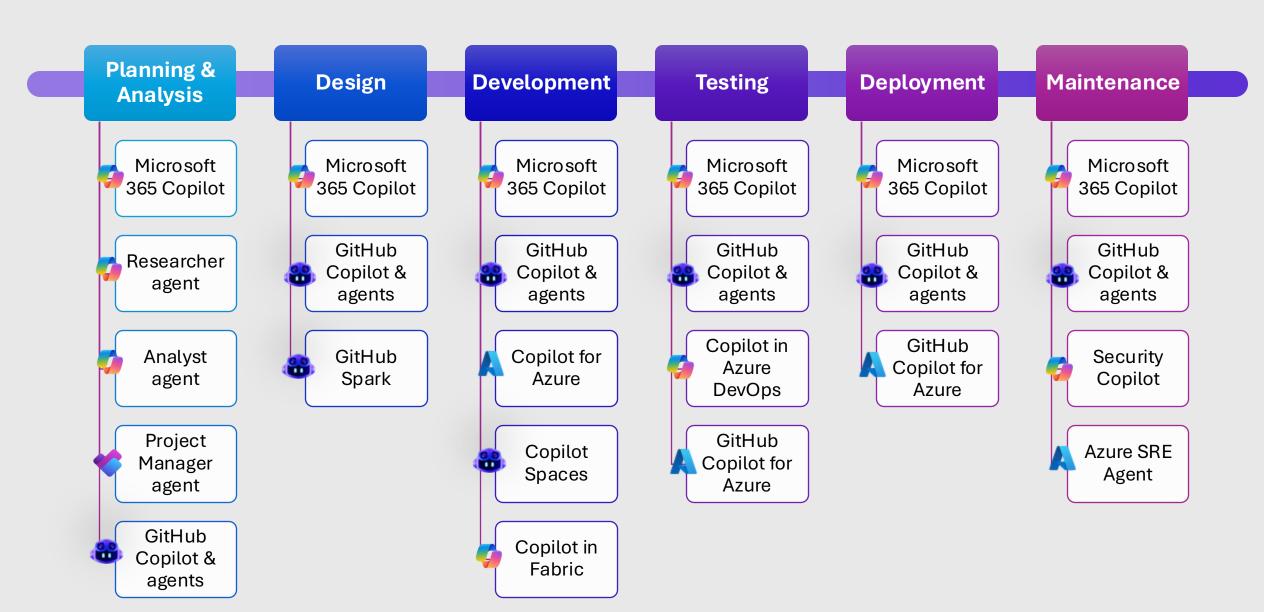
Microsoft Copilots



### GitHub Copilot's Benefits Extend Beyond Developers...



### Copilots & Agents Across the SDLC...



### Copilots & Agents Across Roles

