

MTT/MCT Global Learning Day

**Applying Azure OpenAI to automate
the generation of quotations and invoices**

Presented by: Tony Ahn





Tony Ahn | MCT | MCT Community Lead (2025) | AI, BI, Copilot

Work Experience

- Indie Garage | Founder | 2024.05 – Present
- Microsoft | Technical Trainer | 2021.10 – 2024.04
- DAICON | ML Instructor & Data Scientist | 2020.01 – 2020.08

Teaching Experience


2021.10 – Present	Delivered Azure OpenAI, Azure AI, and Power BI training to approximately over 2,000 professionals in Asia, including Samsung, LG, SK, Hyundai, and KT (Korean, English)
2019.11 – 2021.06	Delivered data science education using Python for universities (students, professors) and researchers



Conference Presentations


2024.12	Analyzing 2024 Paris Olympics with Power BI	DDD Seoul 2024
2023.08	Easily produce and share content using Jupyter Book	PyCon KR 2023
2023.05	GPT Use Cases in Various Industries	6 th PseudoCon
2021.05	Creating Deep Learning Tutorials on PyTorch	2 nd PseudoCon
2020.12	Creating Deep Learning Tutorials on PyTorch	1 st PseudoCon
2019.07	KBO pitcher scouting methodology based on StatCast data	SKBS

Agenda

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- Difference in delivering training services as a FTE vs non-FTE
 - Process of generating quotation and invoice
 - Understanding Power Automate and Azure Logic Apps
 - Main components of the flow
 - Key to integration of Azure Logic Apps and Azure OpenAI

WIIFM

What's In It For Me?

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- Understand the Basics of Azure OpenAI
 - Explore how to integrate Azure OpenAI with Azure Logic Apps or Power Automate actions
 - Understand the impact of automation on productivity and efficiency in administrative tasks

FTE vs non-FTE

- FTE
 - Salary – fixed amount of money regardless of the number of trainings
 - Decided annually
- Non-FTE (freelance, solopreneur)
 - Paid per task – earning on a per-task (hourly, daily) basis
 - Send quotation per-task and invoice when the task is finished

Process of generating quotation and invoice

Quotation

1. Open the request for quotation email
2. Rewrite the items in the email into the quotation template
3. Include estimated cost for each of the items
4. Calculate the total cost
5. Send the quotation to the PoC

Usually once or twice per month

Invoice

1. Open the excel file that tracks the deliveries
2. Identify the deliveries that I have delivered (sometimes the quoted deliveries get cancelled)
3. Rewrite them in the invoice template
4. Calculate the total amount of payment
5. Send the invoice to the PoC

Once at the beginning of every month

Estimated time per task

- Generating quotation: about an hour per month
- Generating invoice: about fifteen minutes
- Why take so long?:
 - Tasks aren't done frequently, (once or twice per month)
 - Sometimes forget about how to perform the process step-by-step
 - Takes a while to think and perform relevant action

Millions of tasks that are waiting to be done...



Power Automate vs Azure Logic Apps

- Business process automation tool (low code)
- Developers don't need to think about deploying their code
 - Can focus on defining the appropriate logic for automation
- Difference in pricing

Power Automate

The screenshot displays the Microsoft Power Automate web interface. The top navigation bar is blue and contains the 'Power Automate' logo, environment information ('Environments Copilot Studio Env US'), and user profile ('SA'). Below the navigation bar, a breadcrumb trail shows '출장비 관련 문의가 왔을 때 • Published'. The main interface is divided into two sections: a left-hand pane for adding actions and a right-hand canvas for building the workflow.

Add an action pane:

- Search:** A search bar with the placeholder text 'Search for an action or connector'.
- By connector:** A section with tabs for 'All', 'Built-in', 'Standard', 'Premium', and 'Custom'. Below the tabs is a grid of connectors, each with an icon and a right-pointing arrow:
 - AI Builder
 - Azure DevOps
 - Desktop flows
 - Mail
 - Microsoft Forms
 - MSN Weather
 - Office 365 Outlook
 - OneDrive
 - OneNote (Business)
 - Planner
 - Approvals
 - Control
 - Excel Online (Business)
 - Microsoft Dataverse
 - Microsoft Teams
 - Notifications
 - Office 365 Users
 - OneDrive for Business
 - Outlook.com
 - Power BI

Workflow canvas:

- The canvas is a grid-based workspace for building a workflow.
- The workflow starts with a trigger: 'When a new email arrives (V3)'.
- It is followed by an action: 'Extract entities from text with one of your custom models'.
- Next is an 'Initialize From' action.
- Then an 'initialize body' action.
- The workflow ends with a 'For each' loop action.

Azure Logic Apps

The screenshot displays the Azure Logic App Designer interface for a logic app named "demo-quotation-logicapp-eng". The interface includes a top navigation bar with the Microsoft Azure logo, a search bar, and various utility icons. The left sidebar contains a navigation menu with options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, and Development Tools. The main workspace shows a workflow diagram with the following steps:

- Trigger:** "If a request for quotation came from a certain user" (Condition trigger).
- Action:** "Initiate array variable for delivery items" (Initialize variable).
- Decision:** "If it was an reply and not an initial request for quotation" (If/Else decision).
- True Path:** "Terminate flow" (Terminate action).
- False Path:** "Convert email body from html format to text format" (Convert action).

The right sidebar, titled "Add an action", provides a search bar and filters for "Runtime" (Select a runtime) and "Action type" (Actions). It lists various actions available for the logic app, including:

- Request (In-app)
- HTTP (In-app)
- Inline Code (In-app)
- SQL Server
- Azure Functions (In-app)
- Office 365 Outlook
- Azure API Management (In-app)
- Azure App Services (In-app)
- Azure Logic Apps (In-app)
- Batch Operations (In-app)
- Control (In-app)
- Data Operations (In-app)

Pricing – Power Automate

Pricing	Compare plans	Licensing guide	Contact us
<h2>Power Automate free trial</h2> <h3>Free</h3> <p>Get started</p> <p>Start automating for free with a 30-day trial.</p> <ul style="list-style-type: none">Experiment with UI-based cloud flows and standard connectors.	<h2>Power Automate Premium</h2> <h3>USD\$15.00</h3> <p>user/month</p> <p>Price does not include tax.</p> <p>Buy now</p> <p>Experience the power of automation with cloud flows, attended desktop flows, and process mining for individual users.</p> <ul style="list-style-type: none">Cloud flows (DPA)¹Desktop flows (RPA) in attended mode²Process and task mining with 50 MB data stored³5,000 AI Builder service credits	<h2>Power Automate Process</h2> <h3>USD\$150.00</h3> <p>bot/month</p> <p>See terms⁵</p> <p>Price does not include tax.</p> <p>Buy now</p> <p>Automate core enterprise processes and run unattended automation.</p> <ul style="list-style-type: none">Cloud flows (DPA)¹Desktop flows (RPA) in unattended mode5,000 AI Builder service creditsDataverse entitlements of 50 MB database and 200 MB file⁴	<h2>Power Automate Hosted Process</h2> <h3>USD\$215.00</h3> <p>bot/month</p> <p>See terms⁵</p> <p>Price does not include tax.</p> <p>Buy now</p> <p>Automate core enterprise processes and run unattended automation with a virtual machine managed by Microsoft and hosted on Azure infrastructure.</p> <ul style="list-style-type: none">Cloud flows (DPA)¹Desktop flows (RPA) in unattended modeMicrosoft hosted virtual machine5,000 AI Builder service

Pricing – Azure Logic Apps

Every time a Logic App definition runs the triggers, action and connector executions are metered.

	Price Per Execution
Actions	First 4,000 actions free - Included \$0.000025

Data retention: \$0.12 GB/month

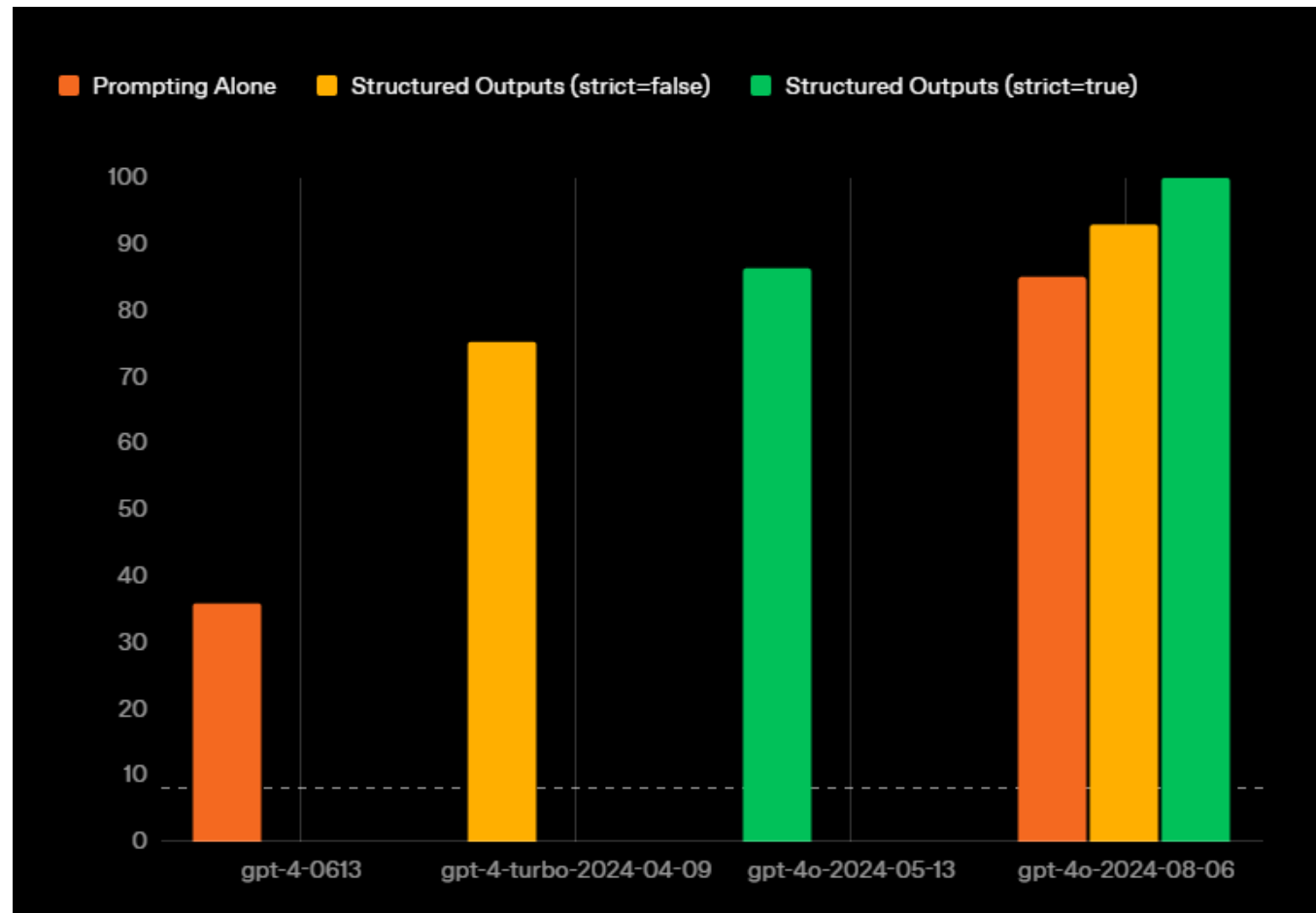
For Azure connectors, billing is based on the number of calls. Please note that number of calls may be different than number of action executions. [Visit billing documentation](#) for more details.

	Price Per Call
Standard Connector	\$0.000125
Enterprise Connector	\$0.001

Demo – Generating quotation

- Flow for generating quotation using Azure Logic Apps and Azure OpenAI

Structured Output feature



Demo – Generating invoice

- Flow for generating invoice using Azure Logic Apps

Boost in productivity

- From 75 minutes to less than 10 minutes
- About 86% decrease in time spent

Thank you

Merci አመሰግናለሁ Grazie धन्यवाद തിന്മ ॥
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