



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
- DACON | 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



- 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?



- 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 shows the Microsoft Power Automate designer interface. At the top, there's a blue header bar with the title "Power Automate". Below it, the navigation bar includes "Environments" (Copilot Studio Env US), "Save draft", "Test", "Publish", "Copilot", and "New designer". A search bar at the top left says "Search for an action or connector". On the left, a sidebar titled "Add an action" lists various connectors under "By connector": AI Builder, Approvals, Azure DevOps, Control, Desktop flows, Excel Online (Business), Mail, Microsoft Dataverse, Microsoft Forms, Microsoft Teams, MSN Weather, Notifications, Office 365 Outlook, Office 365 Users, OneDrive, OneDrive for Business, OneNote (Business), Outlook.com, Planner, and Power BI. The main workspace displays a workflow starting with a "When a new email arrives (V3)" trigger, followed by an "Extract entities from text with one of your custom models" action, an "Initialize From" step, an "Initialize body" step, and finally a "For each" loop.

```
graph TD; Start([When a new email arrives (V3)]) --> Extract[Extract entities from text with one of your custom models]; Extract --> InitializeFrom{Initialize From}; InitializeFrom --> InitializeBody{Initialize body}; InitializeBody --> ForEach{For each}
```

Azure Logic Apps

Microsoft Azure Search resources, services, and docs (G+) Copilot INDIE GARAGE

Home > Logic apps > demo-quotation-logicapp-eng

demo-quotation-logicapp-eng | Logic app designer

Logic app

Search Run Save Discard Parameters Code view Info File a bug

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Resource visualizer Development Tools Logic app designer Logic app code view Logic app templates Run history Versions API connections Quick start guides Settings Settings Authorization Access keys Identity Properties

If a request for quotation came from a certain user

{x} Initiate array variable for delivery items

If it was an reply and not an initial request for quotation

True Terminate flow

False Convert email body from html format to text format

Add an action

Search Runtime Action type Select a runtime Actions

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

Power Automate free trial

Free

[Get started](#)

Start automating for free with a 30-day trial.

- Experiment with UI-based cloud flows and standard connectors.

Power Automate Premium

USD\$15.00

user/month

Price does not include tax.

[Buy now](#)

Experience the power of automation with cloud flows, attended desktop flows, and process mining for individual users.

- Cloud flows (DPA)¹
- Desktop flows (RPA) in attended mode²
- Process and task mining with 50 MB data stored³
- 5,000 AI Builder service credits

Power Automate Process

USD\$150.00

bot/month

[See terms⁵](#)

Price does not include tax.

[Buy now](#)

Automate core enterprise processes and run unattended automation.

- Cloud flows (DPA)¹
- Desktop flows (RPA) in unattended mode
- 5,000 AI Builder service credits
- Dataverse entitlements of 50 MB database and 200 MB file⁴

Power Automate Hosted Process

USD\$215.00

bot/month

[See terms⁵](#)

Price does not include tax.

[Buy now](#)

Automate core enterprise processes and run unattended automation with a virtual machine managed by Microsoft and hosted on Azure infrastructure.

- Cloud flows (DPA)¹
- Desktop flows (RPA) in unattended mode
- Microsoft hosted virtual machine
- 5,000 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

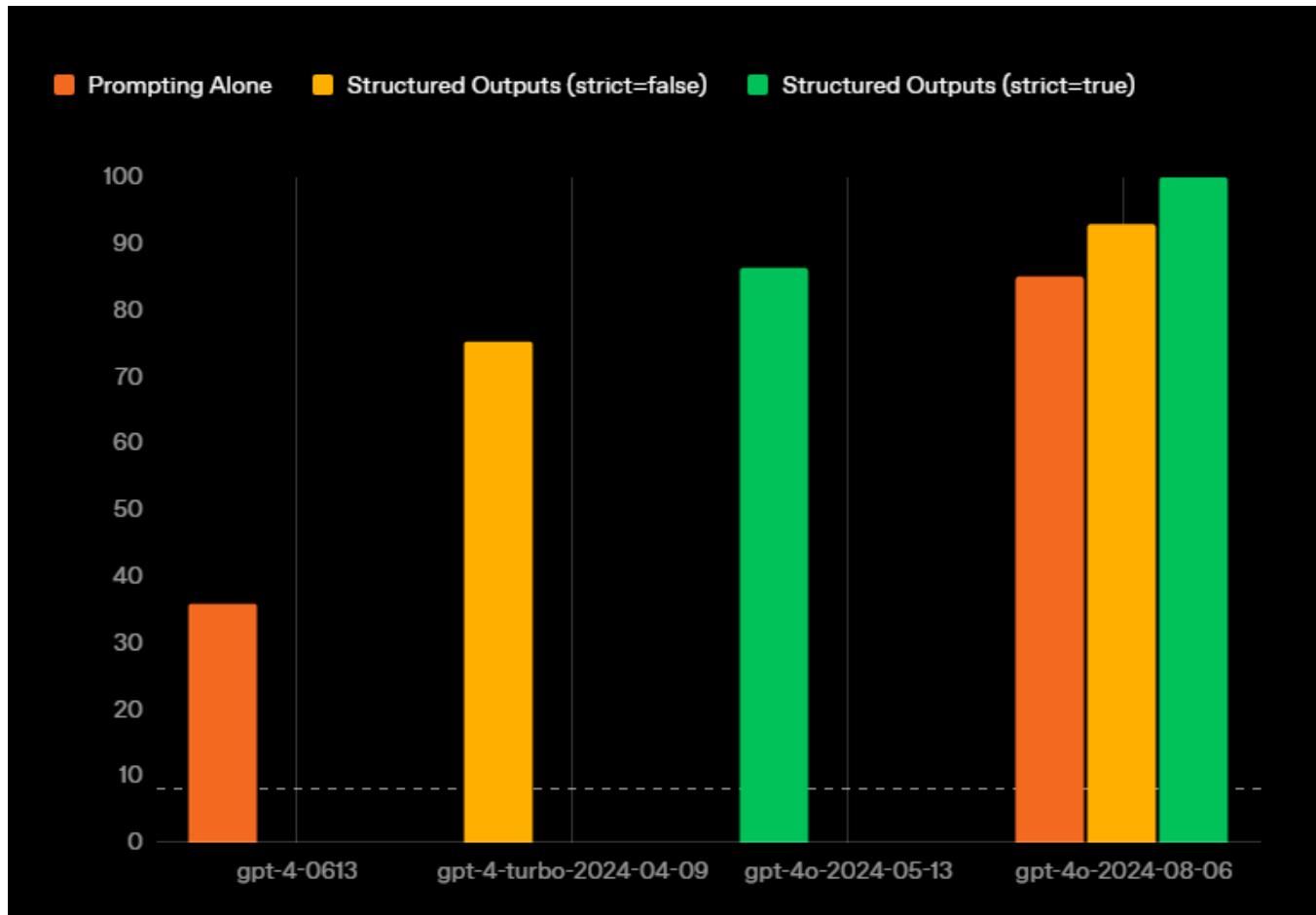
For Azure connectors, billing is based on the number of calls. Please note that number of calls may be different than number of action executions. [Visit billing documentation](#) for more details.

	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



<https://openai.com/index/introducing-structured-outputs-in-the-api/>

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	እምሰንናለሁ	Grazie	ধন্যবাদ	Thetaññig	••
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