GPT-40 in Azure OpenAl

14-May-2024

serge.retkowsky@microsoft.com

OpenAl Spring update

May 13, 2024

Spring Update:

"Introducing GPT-40 and making more capabilities available for free in ChatGPT".



GPT-40 in Azure OpenAl



Al + Machine Learning, Announcements, Azure Al Content Safety, Azure Al Studio, Azure OpenAl Service, Partners

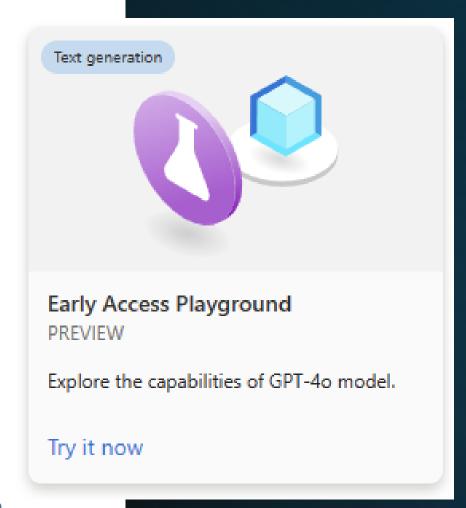
Introducing GPT-4o: OpenAl's new flagship multimodal model now in preview on Azure

By Eric Boyd, Corporate Vice President, Azure Al Platform, Microsoft

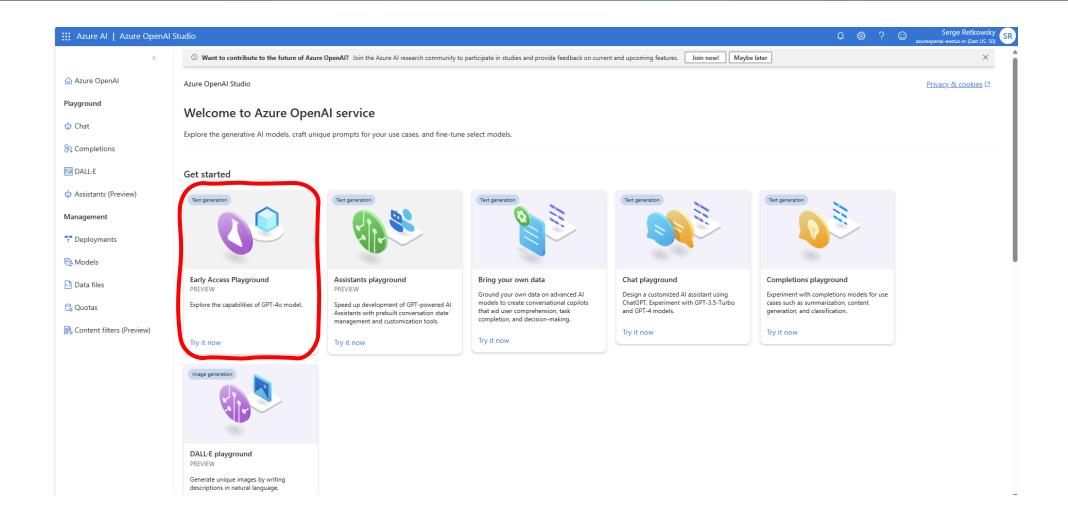
Introducing GPT-4o: OpenAI's new flagship multimodal model now in preview on Azure | Microsoft Azure Blog

GPT-40

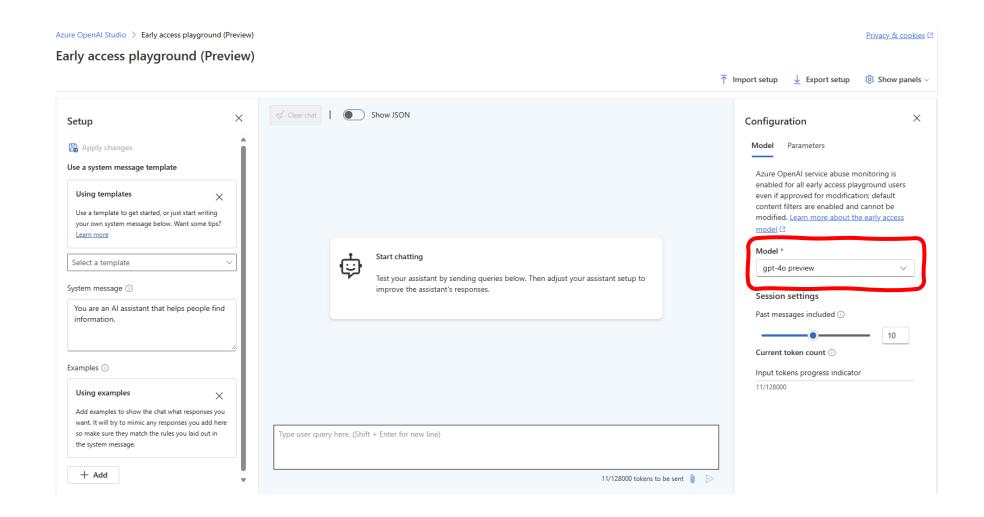
- GPT-4o (o = omni) is available with Azure OpenAI Studio. GPT-4o is the latest preview model from OpenAI. GPT-4o integrates text and images in a single model, enabling it to handle multiple data types simultaneously.
- This multimodal approach enhances accuracy and responsiveness in human-computer interactions.
- GPT-40 matches GPT-4 Turbo in English text and coding tasks while offering superior performance in non-English languages and vision tasks, setting new benchmarks for AI capabilities.
- Azure OpenAl Service models Azure OpenAl | Microsoft Learn



GPT-40 with Azure OpenAl Studio

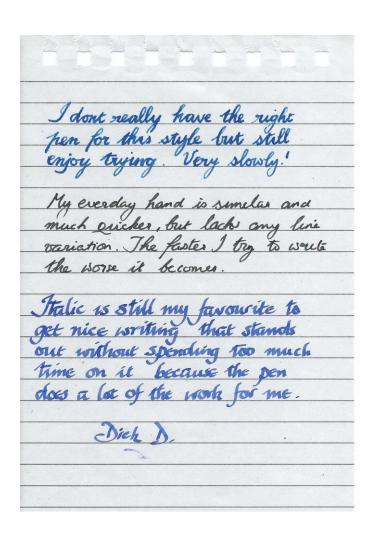


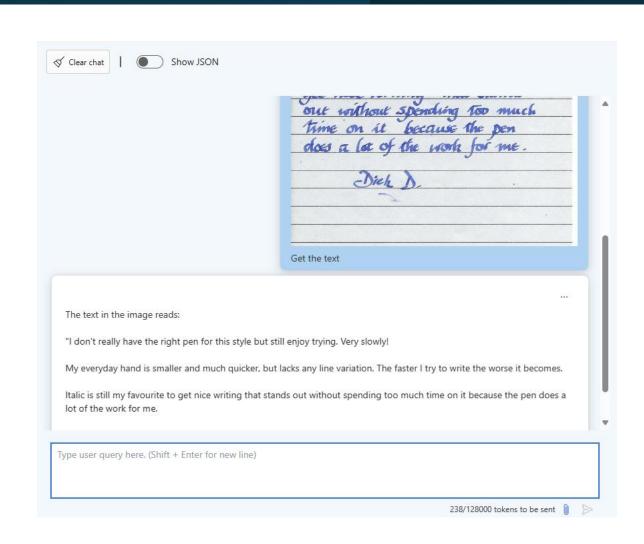
GPT-40 with Azure OpenAl Studio



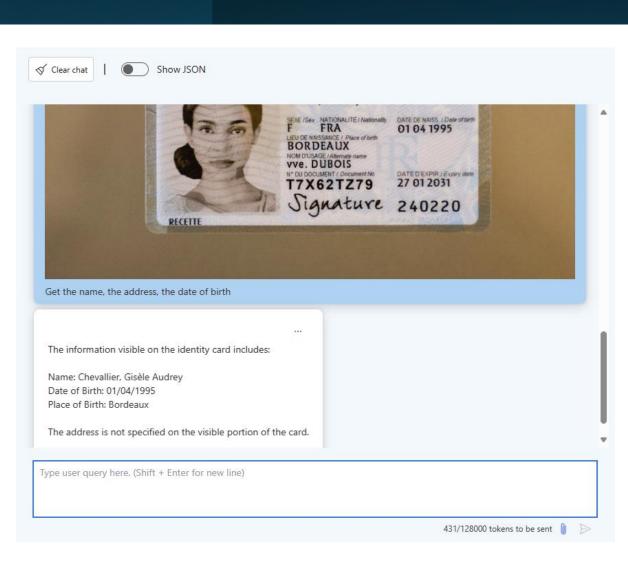




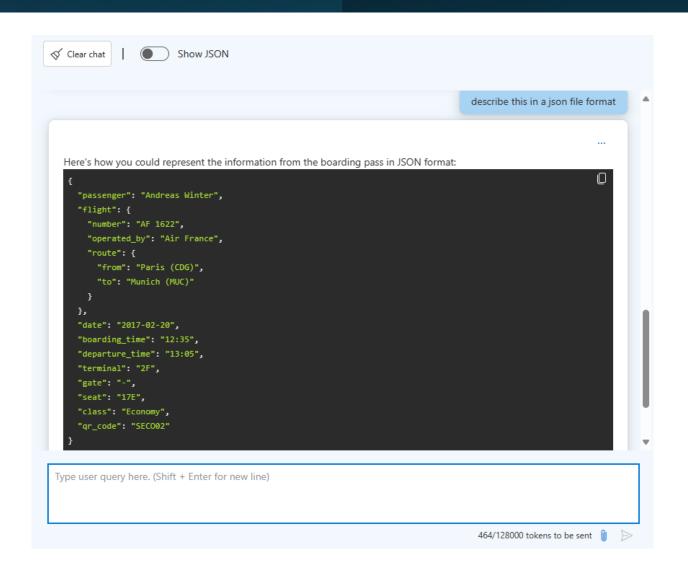


















Show JSON



describe this

This image shows a receipt from Decathlon, a well-known sports retailer. The specific branch is located in Saint Alban Chambery, France. The address is 46 Rue du Marczac, 73230 St Alban Leysse, and the contact number is 04 79 85 37 85.

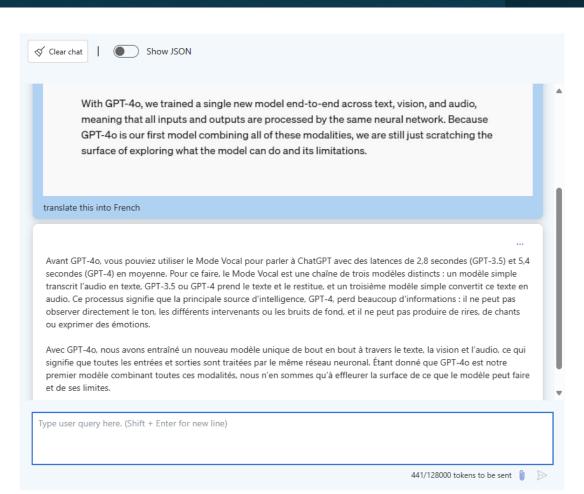
The receipt details two items:

- 1. "NEW CLASSIC ONE NOIR," priced at 29.95 €.
- 2. "BICO 500 LADY NOIR/G," also priced at 29.95 €.

The total amount spent is 59.90 € for the two items. The customer paid 70.00 € in cash and received 10.10 € in change.

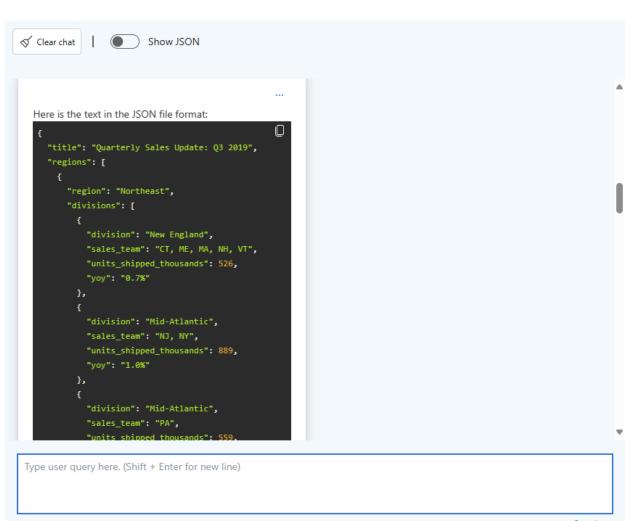
The receipt also shows a VAT (tax) rate of 20%, which amounted to 9.98 € on a pre-tax amount of 49.92 €.

The receipt includes a loyalty card number (2090118313411) and mentions a message about the points collected by the customer. The purchase was made on 06/02/2016 at 15:32, through cashier 8, and the transaction number is 6258. The receipt also mentions a promotional event called "Le Trocathlon," which took place from March 18th to 26th, 2016.



Quarterly Sales Update: Q3 2019

Region	Division	Sales Team	Units Shipped (Thousands)	YoY
Northeast	New England	CT, ME, MA, NH, VT	526	0.7%
	Mid-Atlantic	NJ, NY	889	1.0%
		PA	559	(6.2%)
	Northeast Total		1,974	(1.1%)
Midwest	East North Central	IL	977	20.2%
		IN	582	9.6%
		MI	929	(7.5%)
		ОН	860	6.8%
		WI	1,765	0.9%
	West North Central	IA, KS, NE	754	6.6%
		MN	960	13.1%
		МО	767	(0.2%)
		NE	725	3.2%
		ND, SD	838	2.5%
	Midwest Total		9,157	5.5%
South	South Atlantic	DE	820	9.4%
		FL	636	4.8%
		GA, NC, SC	858	(11.2%)
		MD, VA, DC, WV	931	0.2%
	East South Central	AL, KY, MS, TN	820	6.2%
	West South Central	AR, OK	601	11.6%
		LA, TX	947	4.4%
	South Total		5,613	3.2%
West	Mountain	AZ, CO, ID, MT, NM, UT	1,279	4.0%
	Pacific	AK, HI	332	(5.4%)
		CA	989	3.0%
		OR, WA	542	(7.1%)
	West Total		3,142	0.8%
Total (National)			19,886	3.6%







Show JSON

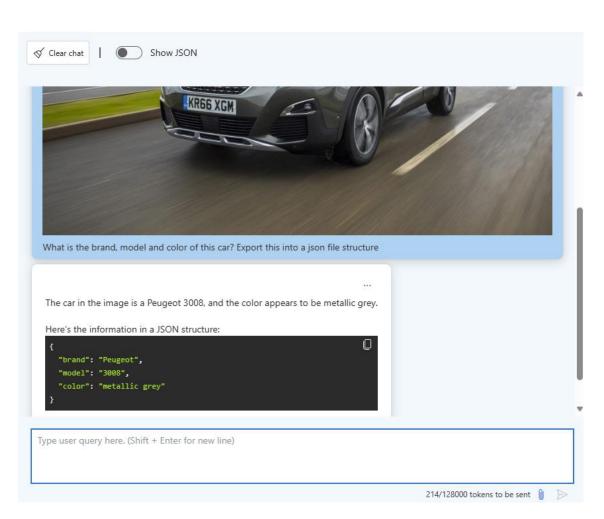
describe this

This is a floor plan of a house with a total area of 1,838 square feet. The layout includes the following:

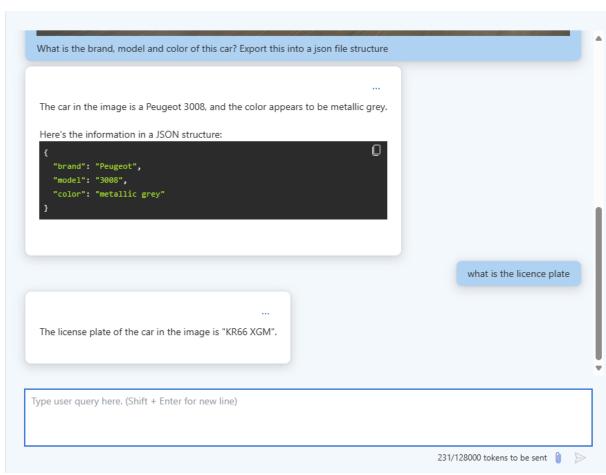
- Great Room: Measuring 13'8" x 19'2", it is the largest room and is likely designed for living and entertainment purposes.
- 2. Nook: Measuring 11'2" x 13'10", it could be used as a dining area adjacent to the kitchen.
- 3. Kitchen: Centrally located in the house with an island that provides additional workspace.
- 4. Master Suite: The primary bedroom, measuring 15'6" x 13'6", includes a private bathroom (labeled "M. Bath") and a walk-in closet ("W/l").
- 5. Bedroom 2 (Bed #2): A smaller bedroom measuring 11'0" x 11'0" with a closet and an adjacent bathroom.
- 6. Bedroom 3 (Bed #3): A bedroom measuring 13'0" x 11'0", also with a walk-in closet and near another bathroom.
- 7. Utility Room: Provides space for laundry and other utilities.
- 8. Covered Patio: An outdoor space at the rear of the house, providing a sheltered outdoor area.
- 9. **Shop**: Measuring 10'0" \times 10'6", it is likely used for storage or as a workshop.
- 10. **Garage**: Measuring 20'0" x 21'0", it offers space for vehicle parking.

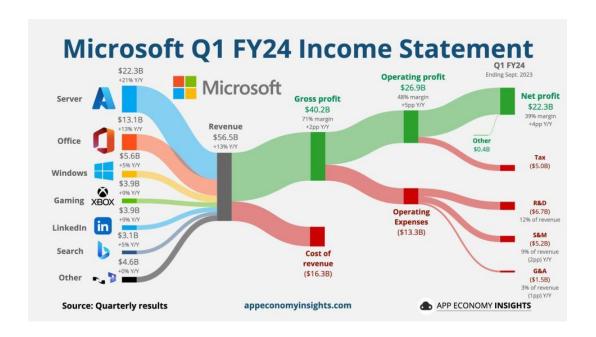
The plan illustrates a well-organized layout with distinct areas for living, dining, and sleeping, along with additional spaces for storage and utility needs.















Show JSON

This image is a visual representation of Microsoft's Q1 FY24 Income Statement. It utilizes a Sankey diagram to show the flow of revenue and expenses.

1. Revenue Breakdown:

- Total revenue is \$56.5 billion, which is a 13% increase year-over-year (YoY).
- o Revenue from different business segments includes:
 - Server (Azure): \$22.3 billion (+21% YoY)
 - Office: \$13.1 billion (+13% YoY)
 - Windows: \$5.6 billion (+5% YoY)
 - Gaming (Xbox): \$3.9 billion (+9% YoY)
 - LinkedIn: \$3.9 billion (+8% YoY)
 - Search: \$3.1 billion (+10% YoY)
 - Other: \$4.6 billion (0% YoY)

2. Expenses:

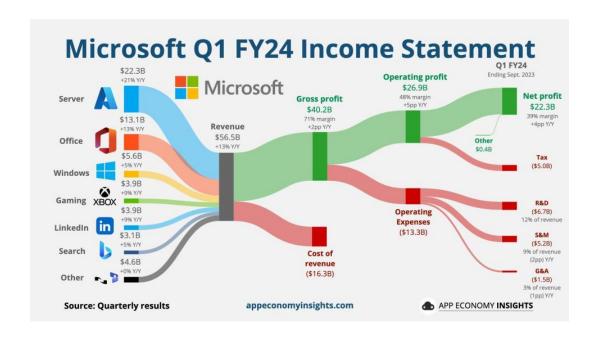
- o The cost of revenue is \$16.3 billion.
- Operating expenses total \$13.3 billion, with specific areas:
 - Research & Development (R&D): \$6.7 billion (12% of revenue)
 - Sales & Marketing (S&M): \$5.2 billion (9% of revenue)
 - General & Administrative (G&A): \$1.4 billion (2% of revenue)

3. Profit Breakdown:

- Gross profit is \$40.2 billion (71% margin, +2pp YoY).
- Operating profit is \$26.9 billion (48% margin, +5pp YoY).
- Net profit is \$22.3 billion (39% margin, +4pp YoY).

4. Other Expenses:

o Taxes amount to \$5.0 billion.







Show JSON

Generate a small financial analysis

Based on the provided Microsoft Q1 FY24 Income Statement, here's a brief financial analysis:

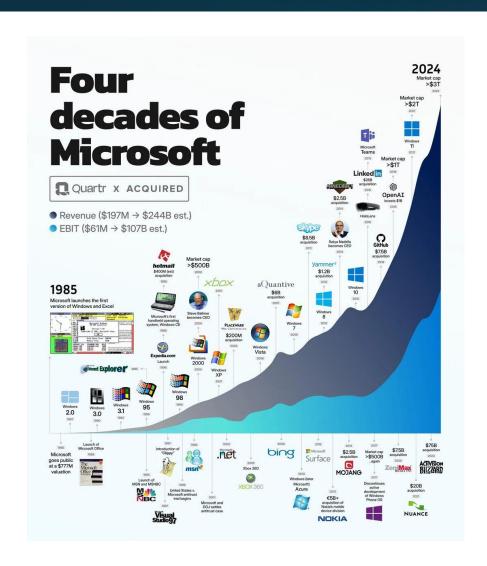
Revenue Growth

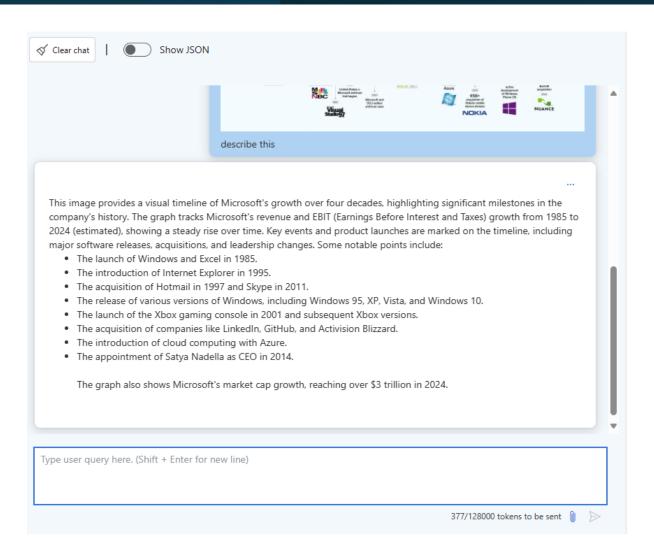
- Total Revenue: Microsoft achieved a total revenue of \$56.5 billion, which represents a 13% year-over-year (YoY) increase. This growth indicates strong overall performance and expansion across multiple business segments.
- Segment Growth: Key segments such as Server (Azure) and Office showed significant growth, with 21% and 13%
 YoY increases, respectively. This suggests robust demand for cloud services and productivity software.

Profitability

- Gross Profit: Gross profit stands at \$40.2 billion with a 71% margin, up 2 percentage points (pp) YoY. This indicates
 efficient cost management in delivering products and services.
- Operating Profit: Operating profit is \$26.9 billion, with a 48% margin, up 5pp YoY. This shows improved efficiency in managing operating expenses relative to revenue growth.
- Net Profit: Net profit is \$22.3 billion, with a 39% margin, up 4pp YoY. This strong net profit margin highlights
 effective cost control across the entire business.

Expense Analysis







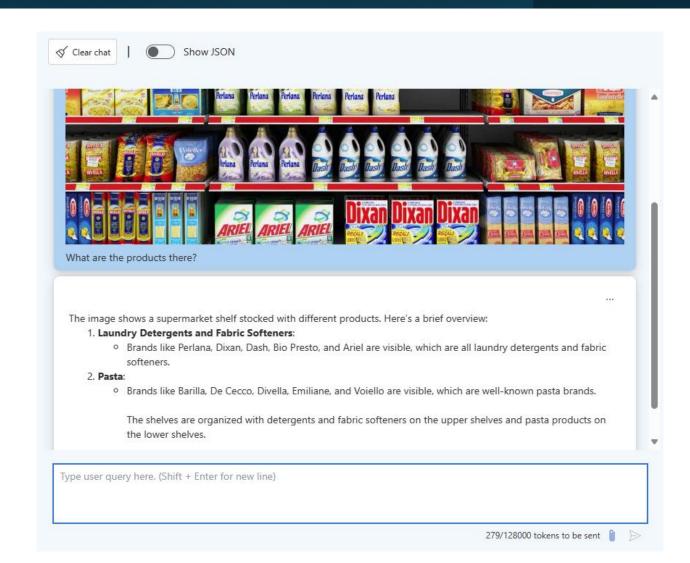


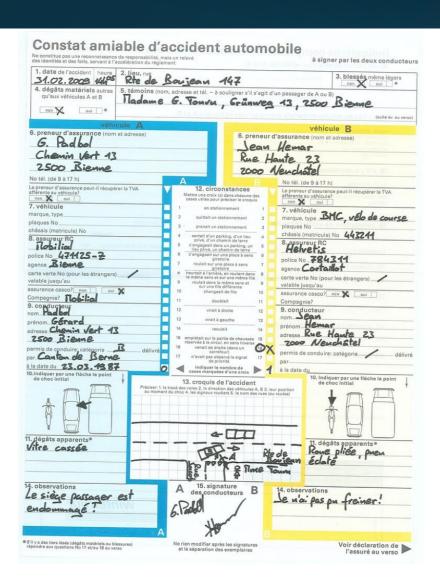
Show JSON



Who is the person on the left?

The person on the left in the image is Charlie Watts, the drummer for the Rolling Stones. He was known for his steady drumming and jazz influences, which became a key part of the band's sound.





Describe this

...

This is a French-language automobile accident report form, typically used to document the details of a car accident. Here's a summary:

1. General Information:

- o Title: "Constat amiable d'accident automobile" (Friendly accident report)
- · The form states that it is not an admission of liability but a record of facts.

2. Details of the Accident:

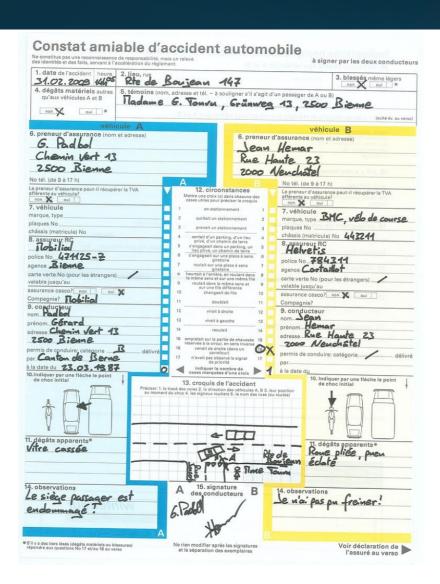
- Date and Time: 31/02/2008, 14:05
- o Location: Rue de Boujean 147
- Witnesses: Madame E. Tonva, Grümweg 13, 2500 Bienne

Vehicle A:

- o Driver: G. Padbol, Chemin Vert 13, 2500 Bienne
- o Insurance: Mobiliar, Policy No. 474125-7
- Vehicle Details:
 - Make: Not specified
 - · Registration: Not specified
- o Damage: Broken window
- Observations: "Le siège passager est endommagé" (The passenger seat is damaged)

4. Vehicle B:

- Driver: Jean Hemar, Rue Haute 23, 2000 Neuchâtel
- o Insurance: Helvetia, Policy No. 784231
- Vehicle Details:







Show JSON

- o Insurance: Mobiliar, Policy No. 474125-7
- Vehicle Details:
 - Make: Not specified
 - Registration: Not specified
- o Damage: Broken window
- o Observations: "Le siège passager est endommagé" (The passenger seat is damaged)

4. Vehicle B:

- Driver: Jean Hemar, Rue Haute 23, 2000 Neuchâtel
- o Insurance: Helvetia, Policy No. 784231
- Vehicle Details:
 - Make: BMC (bicycle)
 - Registration: 463211
- o Damage: Bent wheel, flat tire
- Observations: "Je n'ai pas pu freiner!" (I couldn't brake!)

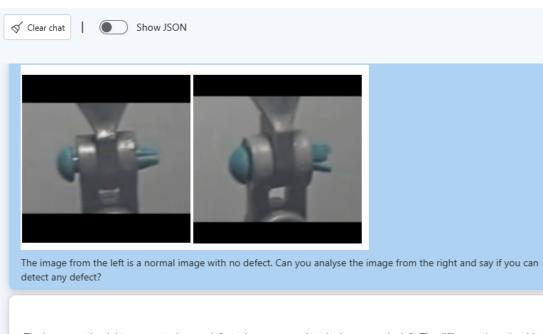
5. Circumstances:

- A checklist of different possible scenarios is provided, and the relevant boxes are checked.
- o A diagram indicates the point of impact for both vehicles.

6. Signatures:

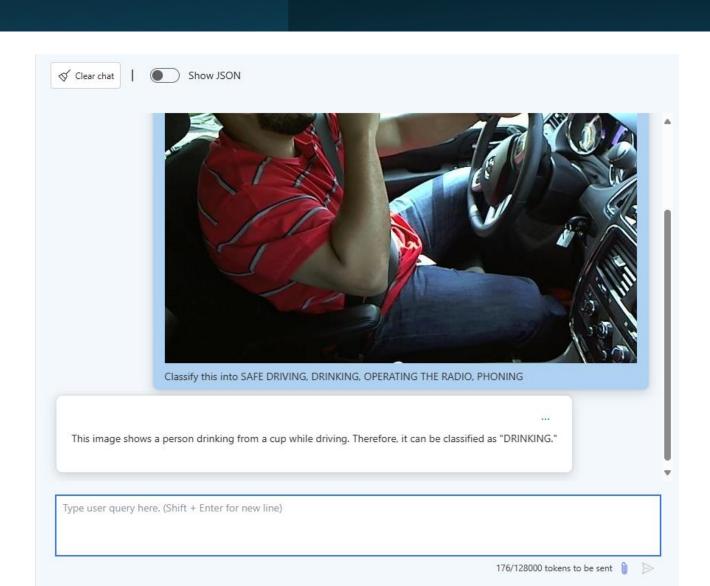
o Both drivers (G. Padbol and Jean Hemar) have signed the form to acknowledge the details of the accident.

The form provides a structured way to capture the circumstances and details of an accident, which can then be used by insurance companies to assess the situation.

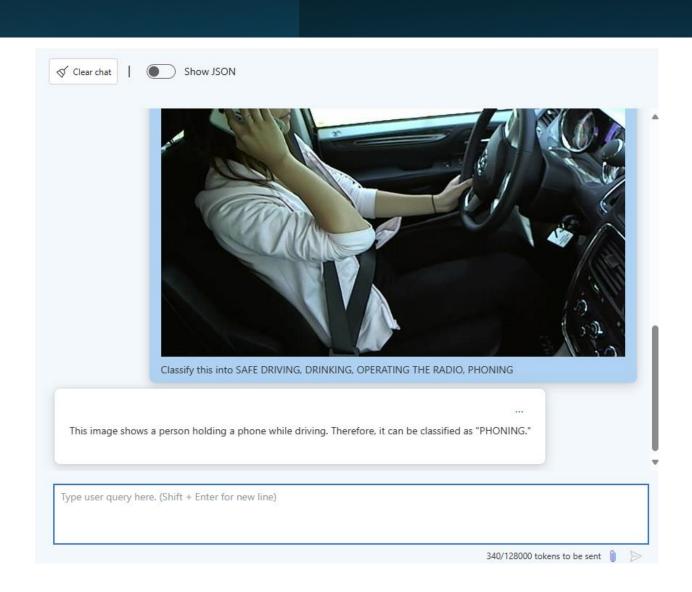


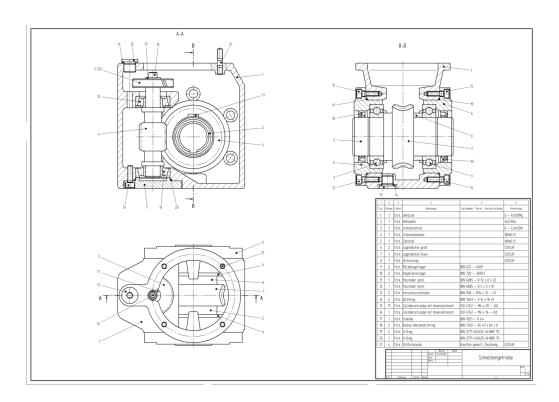
The image on the right appears to have a defect when compared to the image on the left. The difference is noticeable in the teal-colored component that protrudes from the metallic structure. Specifically, the teal part appears to be broken or malformed on the right image. The left image shows a more intact and well-defined teal component, while the right image shows a broken tip. This might indicate a manufacturing defect or damage to the teal part.















This is a detailed technical drawing of a mechanical assembly, likely a gear mechanism, given the visible components and the title "Schneckengetriebe" (which translates to "worm gear" in English). Here are some points worth noting:

- 1. Drawing Views: The drawing includes three views:
 - o Top Left: A cross-sectional view along the plane A-A, showing the worm gear and housing.
 - Top Right: A cross-sectional view along the plane B-B, showing the worm wheel and the bearings.
 - Bottom: A top view of the assembly.
- 2. Parts List (BOM): The bottom right corner contains a Bill of Materials (BOM), listing the parts used in the assembly:
 - Position numbers (Pos.)
 - Quantity (Menge)
 - Description (Benennung)
 - Material/Standard (Sachnummer/Norm)
 - Additional Notes (Bemerkung)
- 3. Materials: The BOM provides material specifications for various components, such as:
 - Part 1: Housing (Gehäuse) Material: G-AlSi10Mg
 - o Part 2: Worm wheel (Schneckenrad) Material: CuSn12Ni
 - Part 3: Worm shaft (Schneckenwelle) Material: 16MnCr5
- 4. Fasteners and Seals: The BOM mentions standard fasteners (DIN standards) and seals like O-rings.
- 5. Assembly Details: The cross-sectional views reveal details about the assembly, showing the arrangement of gears, shafts, bearings, and fasteners. The drawing is annotated with reference numbers corresponding to the BOM.
- 6. Dimensioning and Tolerancing: The drawing includes dimensions for various parts, ensuring proper fit and function. The tolerances are likely specified on the drawing but aren't immediately visible in this view.
- 7. Annotations: The drawing uses annotations to reference parts and assembly instructions, which are crucial for manufacturing and assembly.



describe this

The image shows an electrical distribution board or panel manufactured by Schneider Electric. It's a PrismaSeT system, which is typically used for electrical distribution in commercial and industrial settings. The panel includes various circuit breakers, protection devices, and other components designed to control and protect electrical circuits. The components are neatly arranged and labeled for easy identification and maintenance. There is also a digital display in the middle, which is likely used for monitoring and controlling the system. The panel is enclosed in a protective case with a transparent door to allow for visual inspection without opening it.

•••







Show JSON

What are the main components?

The main components visible in the electrical distribution board in the image include:

- Circuit Breakers: These are switch-like devices that protect the electrical circuit from overcurrent by automatically
 interrupting the flow of electricity in case of faults. They are the larger devices with toggles labeled "Q31", "Q21", etc.
- Residual Current Devices (RCDs): These are protective devices that disconnect the circuit when an imbalance between live and neutral currents is detected, indicating a potential leakage or fault. They are often combined with circuit breakers for enhanced protection.
- 3. **Digital Display**: The digital display in the middle is likely a monitoring device that provides real-time information about the electrical system's status, such as voltage, current, and other parameters.
- Power Supply or Control Module: The green module in the middle appears to be a control module, which might handle communication, monitoring, or control functions for the system.
- Terminal Blocks: These are used for connecting wires from different circuits, visible as rows of screws and connectors.
- Current Transformers (CTs): The devices labeled "PC1" and "PC2" appear to be current transformers, used to measure the current in a circuit and provide signals to monitoring devices.
- Wiring and Busbars: The board contains internal wiring that connects the various components and busbars to distribute power.

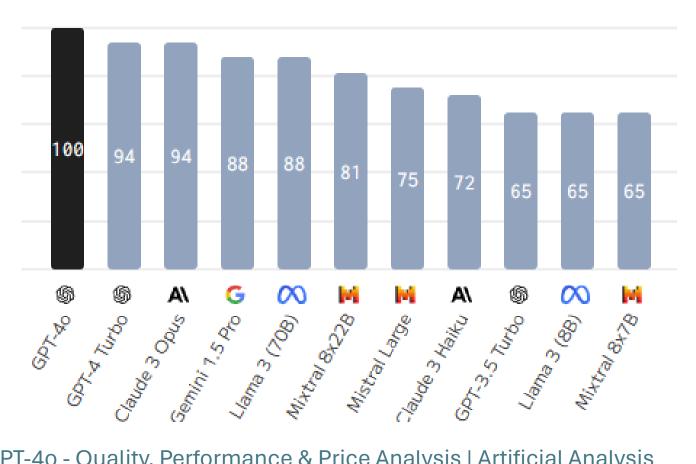
These components work together to ensure the safe and efficient distribution of electricity in the system.



Quality

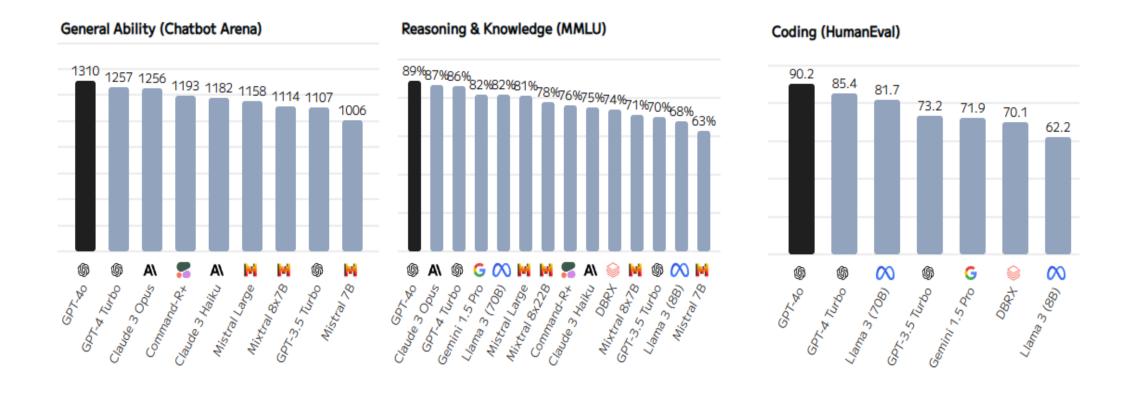
QUALITY

Quality Index; Higher is better



GPT-40 - Quality, Performance & Price Analysis | Artificial Analysis

Performance



Quality vs Price

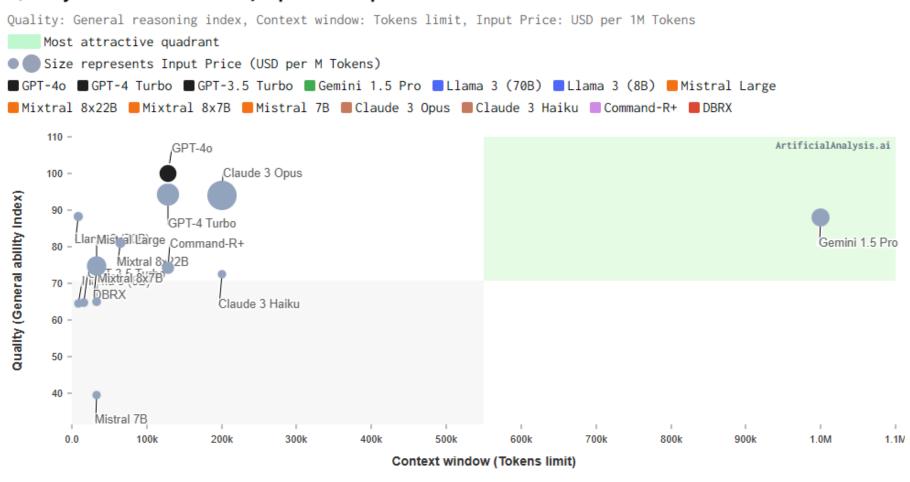
Quality vs. Price



GPT-40 - Quality, Performance & Price Analysis | Artificial Analysis

Quality vs Context Window, Input token price

Quality vs. Context window, Input token price



GPT-40 - Quality, Performance & Price Analysis | Artificial Analysis

Microsoft notes

- Vocal capabilities are not yet available.
- The GPT-40 early access playground is currently only available for resources in **West US3** and **East US**.
- Limitation of 10 requests every five minutes per subscription.
- Azure OpenAI service abuse monitoring is enabled for all early access playground users even if approved for modification; default content filters are enabled and cannot be modified.
- GPT-40 is an Azure OpenAl **preview** model and is currently not available for deployment/direct API access.

OpenAl information

- GPT-40 is our latest step in pushing the boundaries of deep learning, this time in the direction of practical usability. We spent a lot of effort over the last two years working on efficiency improvements at every layer of the stack. As a first fruit of this research, we're able to make a GPT-4 level model available much more broadly. GPT-40's capabilities will be rolled out iteratively (with extended red team access starting today).
- GPT-4o's text and image capabilities are starting to roll out today in ChatGPT. We are making GPT-4o available in the free tier, and to Plus users with up to 5x higher message limits. We'll roll out a new version of Voice Mode with GPT-4o in alpha within ChatGPT Plus in the coming weeks.
- Developers can also now access GPT-40 in the API as a text and vision model. <u>GPT-40 is 2x faster, half</u> the price, and has 5x higher rate limits compared to GPT-4 Turbo. We plan to launch support for GPT-4o's new audio and video capabilities to a small group of trusted partners in the API in the coming weeks.

Source: Hello GPT-40 | OpenAl

Links

• Microsoft:

- Azure OpenAl Service models Azure OpenAl | Microsoft Learn
- Introducing GPT-4o: OpenAI's new flagship multimodal model now in preview on Azure | Microsoft Azure Blog

OpenAI:

- Introducing GPT-4o and more tools to ChatGPT free users | OpenAl
- Spring Update | OpenAl