Un Café con EY

Nuestra visión y estrategia de la Inteligencia Artificial Responsable (IAR)

October 2023

Building a better working world

Our team today

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Socia global de IA en EY

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AGENDA

1 | **Introduction to AI and Generative AI**

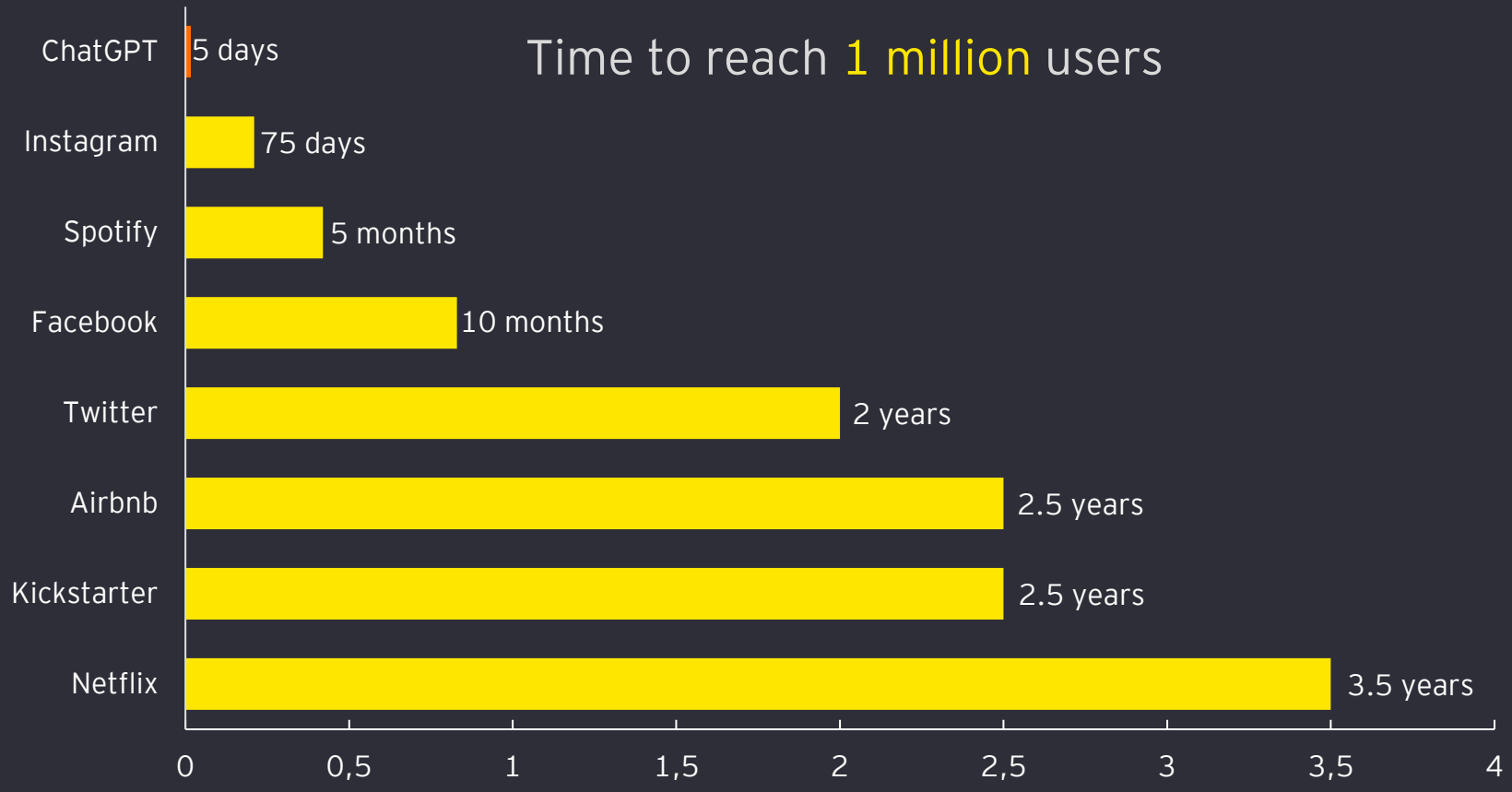
2 | Market perspectives and opportunities

3 | EY market leading response

1

Introduction to AI and Generative AI

ChatGPT adoption path broke previous records, and it has made AI –and specially Gen-AI- very popular and a hot trending topic



Compared to other popular platforms, ChatGPT has grown incredibly fast.

It reached a million users in just five days, 70 days faster than Instagram, the second fastest platform to reach 1 million users.

ChatGPT is the fastest growing consumer application to date, reaching 100M users in <2 months (faster than Instagram, Twitter, Snapchat…)

What is Generative Artificial Intelligence – also called Generative AI or Gen-AI?

Artificial Intelligence

AI, or artificial intelligence, is a field of computer science that focuses on creating intelligent machines capable of tasks requiring human intelligence, capable of reproducing or surpassing human intelligence.

Machine Learning

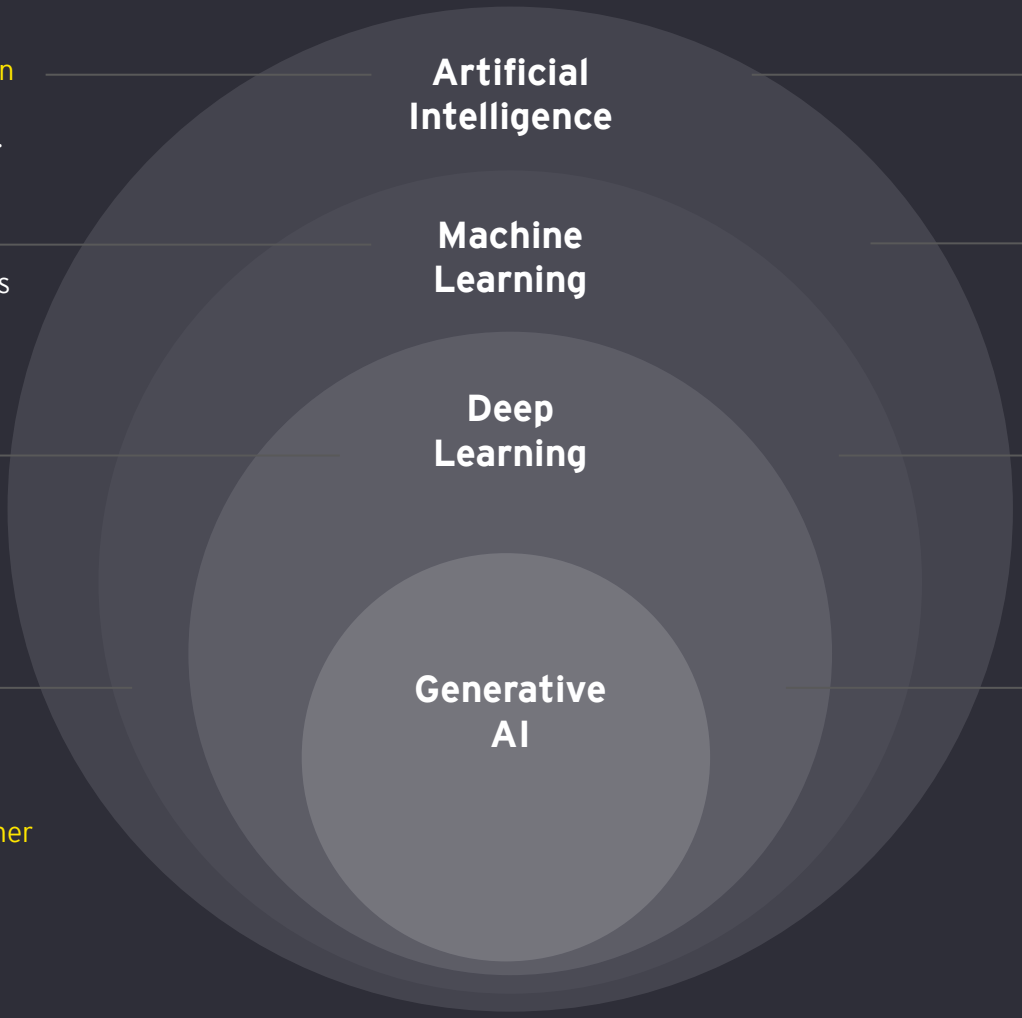
Machine learning is a subfield of artificial intelligence, broadly defined as the capability of a machine to imitate intelligent human behaviour, learning from existing data and enhancing it to make decisions or predictions.

Deep Learning

Deep learning is a subset of machine learning, which is essentially a neural network with three or more layers.

Generative AI

Generative AI is a type of artificial intelligence that can create new content such as images, text, audio, or video based on the data it has been trained on, using techniques like large language models, transformer neural networks, and generative adversarial networks



Technology appearance

1943

1959

2006

2017

2

Market perspectives and opportunities

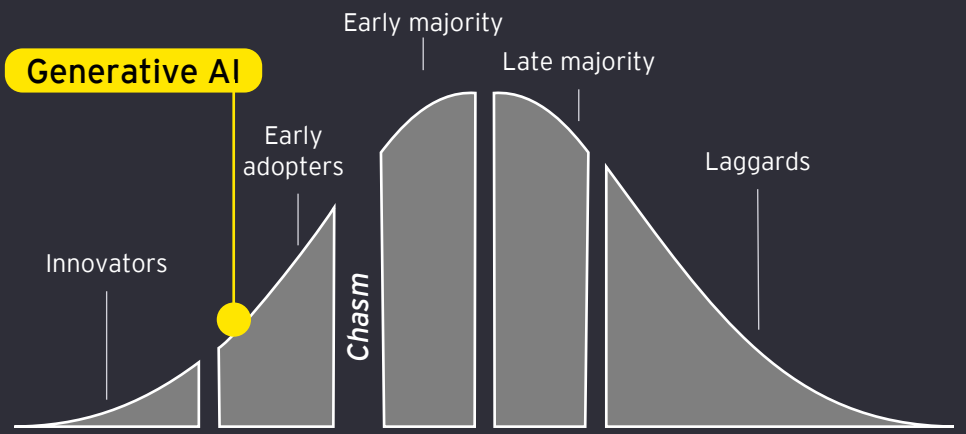
Gen-AI is not a hype; it is driving the fastest ever market transformation

What makes it different this time?

Key trends in Gen-AI

1. **Emergent Abilities found in Extra Large Models**
2. **Democratization of AI**
3. **Accelerated Funding in AI**
4. **Exponential growth (multiplying effects)**

Generative AI adoption curve



- All major and niche tech and solution providers are progressively investing in Research & Development (R&D) activities and launching their own generative AI technologies, solutions and tools…
  - … for both Gen-AI and "traditional" AI
- Many companies are exploring AI based used cases and testing internally different concepts
- There has been a "boom" of new projects and start-ups working on new products, services and business models
- As a result, **some industries and sectors will be dramatically disrupted**

Acceleration has been amazing these last months… and it will still speed up!

April 2022

November 2022

…

March 2022

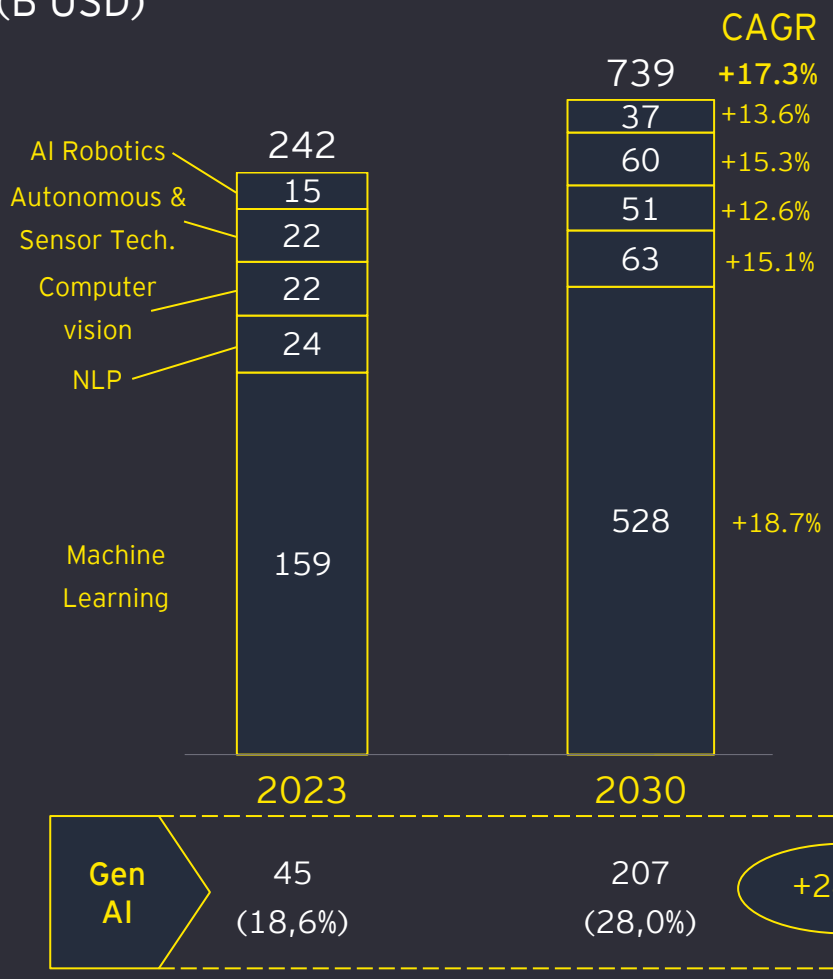
July 2022

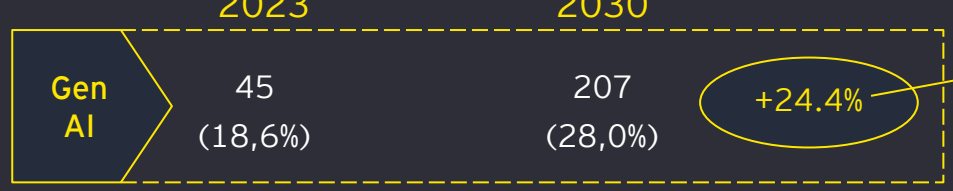
March 2023

Generative-AI technologies are about to flood the market in the coming years, growing above the rest of AI categories

Global AI market size projections by category

(B USD)



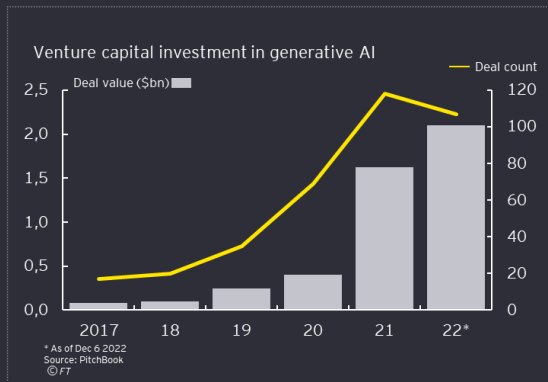


- Other more optimistic Generative AI market size projections point at growth rates of ≃ 30%-35% CAGR

Other expected growth indicators for AI

THE WALL STREET JOURNAL. WSJ

PitchBook estimates the market for Enterprise AI applications alone will rise to $98B in 2026 from $40B this year



Venture Capital investment in Generative AI is up **425%** as of late 2022 and continuing to surge.

These growth expectations will be influenced by some threats and trends to consider

Threats and restraints

- Lack of skilled personnel
- Control limitations
- Security concerns
- Data privacy and data property concerns
- Regulations: labour and tax
- Unrealistic expectations
- Economic downturn, impacting funding and investments

Other trends to consider

- "*Do it yourself*": +300% small IA products from "garage" or "basement" companies vs. -69% new start-ups in AI in 2023 vs 2022
- 83% of 2023 start-ups with less than 10 people
- Macro slowing down: global investments reducing by 43% and AI by 49% in 1Q 2023
- Funding of AI decreasing:
  - 49% less start-ups backed-up by investors during 1Q 2023
  - Start-ups funding expected to shrink by 38% at the end of 2023
- Giant tech companies integrating AI, increasing their market value by +3,5% and improving results
- M&A in AI sector slowing-down, decreasing by 23% in 1Q 2023

In addition, AI technologies, yet so promising and powerful, present some limitations and challenges

Generative AI is a powerful technology that has the capacity to disrupt financial services, and all sectors in general. Beyond causing questions related to the Human vs Machine balance, presents several limitations and challenges that need to be addressed to ensure the effectiveness and safety of generative AI systems.

Quality of generated outputs

The generated outputs of Generative AI systems may contain errors or artifacts. This can be due to a lack of data, a poor training, or an overly complex model

Bias & Fairness

Generative AI systems can inadvertently replicate biases present in the training data. This can lead to discriminatory or unfair results

Computational requirements

Generative AI systems require large amounts of data and computational resources. This can be expensive, time-consuming and cause ecological issues, which can be a barrier to entry for some organizations

Cost & Pricing model

Beyond the high development costs of Generative AI systems, it can be difficult to determine the value of the outputs generated and therefore develop pricing and cost models that accurately reflect the value provided to customers

Legal issues

Generative AI raises legal issues, such as copyright infringement, intellectual property of the generated content, or liability if AI-generated content causes harm or violates the law

Privacy & Security

Generative AI systems may be vulnerable to cyberattacks, which can compromise the security and privacy of the data used to train these algorithms that may contain sensitive information about individuals or the generated content itself

Today, despite the initial enthusiasm, there is still a gap in adopting Gen-AI solutions at scale, with most companies still testing small pilots

Very high and unrealistic expectations	• Too high expectations have led to some disappointing tests and results, and gaps between reality and plans
Wrong assumptions and understanding of technology	• Gen-AI models neither learn nor can be trained (except for the models' developers and own-self-learning algorithm)
'If all you have is a hammer, everything looks like a nail'	• LLMs are excellent for languages (voice, text) but poor for numbers and worse for calculations • Other AI technologies or solutions are better than Gen-AI or can be added to expand the reach of Gen-AI
Poor access and quality of data	• AI and Gen-AI use data. If data quality is poor or access is limited, results will be bad.
Underestimation of enterprise and specific knowledge	• Democratization of access to Gen-AI technologies has facilitated demos and POCs. However, expertise in cognitive and conversational processes, as well as the technical stack, modules and services, are very convenient
Bottom-up / narrow approach	• Most companies follow a case-by-case approach, resulting in a list of scattered use cases. A multi-year vision plan enabled by connected cases can lead to more a transformative approach

The market is transitioning from ideas and concepts, to implementation and execution initiatives

EY Spain is prepared to tackle these opportunities and is working on them; new things are coming!

EY strengths

- Real valuable credentials in AI, with great results…
- … and a solid track record in large transformation projects
- Recognized technical capabilities
- Leaders in AI in most analysts' panels and quadrants
- Great expertise in AI in Consulting and in the Wavespace
  - However, disconnected teams and lack of alignment
- Madrid Wavespace appointed as Global EY Center of Excellence in AI
- Madrid Wavespace appointed as Microsoft Center of Excellence for Microsoft (strategic partner)
- The Global Leader (Beatriz Sanz) of AI in EY is located in Madrid

Initiatives in progress

- Global positioning and communication plan
- EY Spain positioning and communication plan
- Mapping of technical capabilities and credentials (scattered throughout the Firm)
- Increasing collaboration among different business units
  - Working model still with a lot of room for improvement
- Strong pipeline and demand from clients
- Plan to increase bandwidth and capabilities
  - Hiring
  - Training and conversion of technical / data scientists' profiles

3

EY leading market response

EY.ai media coverage

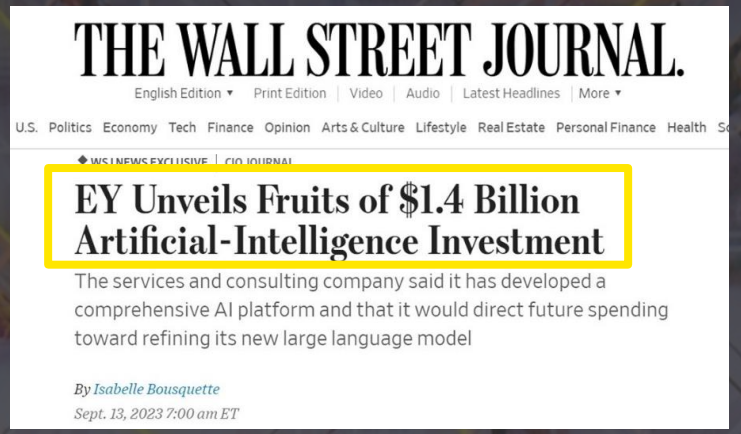
Expansión

EY nombra una socia española para dirigir IA a nivel mundial

CON 9.000 PROFESIONALES A CARGO/ La nueva responsable, Beatriz Sanz, forma parte de la firma desde hace veinte años.

Beatriz Sanz, socia responsable de IA en EY, junto a Federico Linares, presidente de EY España.

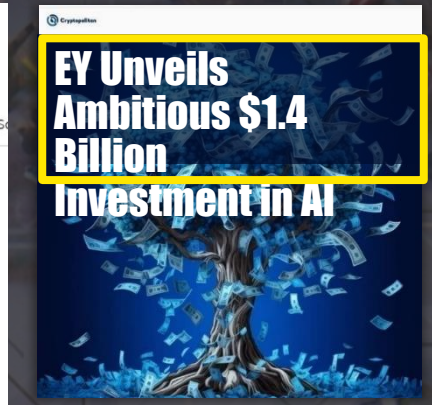
Puig: Así se creó el imperio

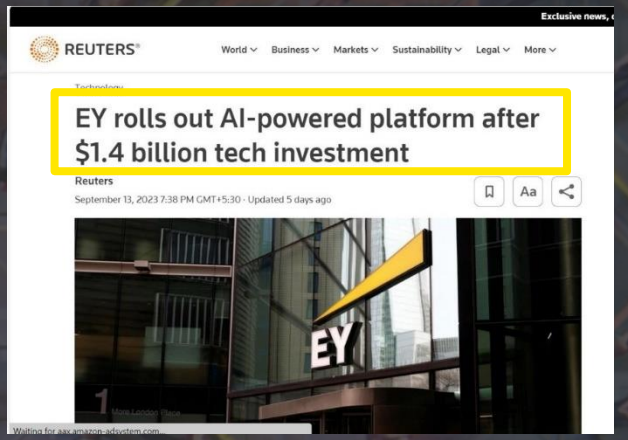

THE WALL STREET JOURNAL.

EY Unveils Fruits of $1.4 Billion Artificial-Intelligence Investment

The services and consulting company said it has developed a comprehensive AI platform and that it would direct future spending toward refining its new large language model

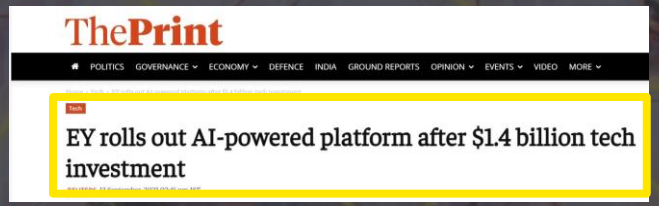
By Isabelle Bousquette
Sept. 13, 2023 7:00 am ET




REUTERS

EY rolls out AI-powered platform after $1.4 billion tech investment

Reuters
September 13, 2023 7:38 PM GMT+5:30 · Updated 5 days ago


ThePrint

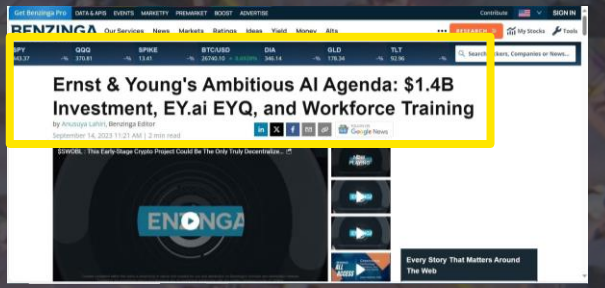
EY rolls out AI-powered platform after $1.4 billion tech investment

Home > News > BUSINESS

EY rolls out AI-powered platform after $1.4 billion tech investment

The move aligns the consulting firm with rivals like KPMG and Accenture, which are pouring billions into AI, hoping it will be their next big growth driver.

REUTERS | SEPTEMBER 13, 2023 / 07:52 PM IST


Ernst & Young's Ambitious AI Agenda: $1.4B Investment, EY.ai EYQ, and Workforce Training

EY Says It Has Invested $1.4 Billion in AI

By Isabelle Bousquette

Consulting firm EY said it recently completed a $1.4 billion investment into artificial intelligence, the latest among a series of peers to make a billion-dollar announcement regarding the rapidly developing technology.

In addition to the $1.4 billion investment, announced Wednesday, the professional-services company said it has created its own large language model, EY.ai EYQ, and that it would train its 400,000 employee workforce on AI.

EY declined to comment on the exact sum it would spend on AI going forward, but said the amount is more per year than it has spent over the past five years.

Future investment includes continuing to refine its large language model.

A few of EY's peers have also made big-bang AI announcements over the past year.

KPMG in July said it planned to spend $2 billion in AI and cloud services globally over the next five years. Also in July, **Accenture** announced a $3 billion investment to expand its data and AI practice.

PricewaterhouseCoopers in April said it planned to invest $1 billion in generative AI in its U.S. operations over a three-year period, and **Deloitte** in December said it was spending $1.4 billion on employee training on technologies including AI.

The EY.ai platform unveiled Wednesday includes new and existing EY products that now have AI embedded in them, such as EY Fabric, which helps companies manage their data, according to the company.

It also has a library of use cases that essentially provide a path for how companies can safely and effectively deploy AI at scale, EY said.

Andy Baldwin, EY global managing partner, client service, said the guidelines and frameworks, which include best practices for risk, governance and data management, are intended to help companies answer the question: "Where do I even start with AI?"

"That's part of the challenge for a lot of companies—they all started in very different places on this technology," Baldwin said.

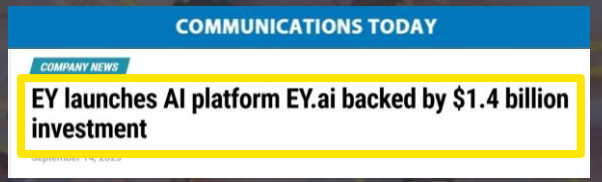
"For some of them, it's more of a natural evolution. For some of them, they're starting from scratch."

One challenge that EY is also hoping to solve for customers is uncertainty over privacy and data security when using large language models.

EY's new large language model is trained on publicly available data from the internet, but can be used in a safe and secure way: In other words, customers don't need to be concerned that prompts they feed the model could find their way back into its training data, Baldwin said.

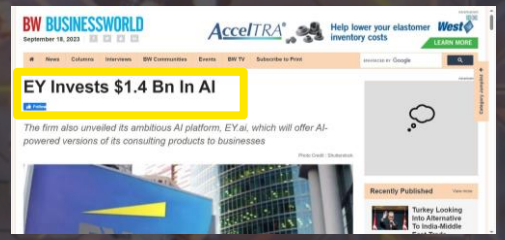
Going forward, the goal is to train the model on EY's own library of data and create a series of use-specific LLMs, such as an LLM trained on EY's hundred-plus years' worth of tax data, Baldwin said.

EY's peers have also made big-bang AI announcements in the past year.


COMMUNICATIONS TODAY

COMPANY NEWS

EY launches AI platform EY.ai backed by $1.4 billion investment


BW BUSINESSWORLD

EY Invests $1.4 Bn In AI

The firm also unveiled its ambitious AI platform, EY.ai, which will offer AI-powered versions of its consulting products to businesses

EY.ai has just been launched !!!

EY.ai

People

Multi-disciplinary expertise

Ecosystem

Holistic insights & research

Technology

AI-embedded services and solution

Underpinned by foundational elements

EY.ai Value Accelerator

EY.ai Maturity Model

EY.ai Confidence Index

EY.ai program structure

Transforming clients

1. Winning in the market
2. AI powered solutions
3. AI Ecosystem Strategy

Transforming EY

1. Functions reimagine
2. Employee experience
3. Tech Transformation

Transforming the world

1. Public Policy
2. Confidence Index
3. Ethics

BMC, Enablement, Learning

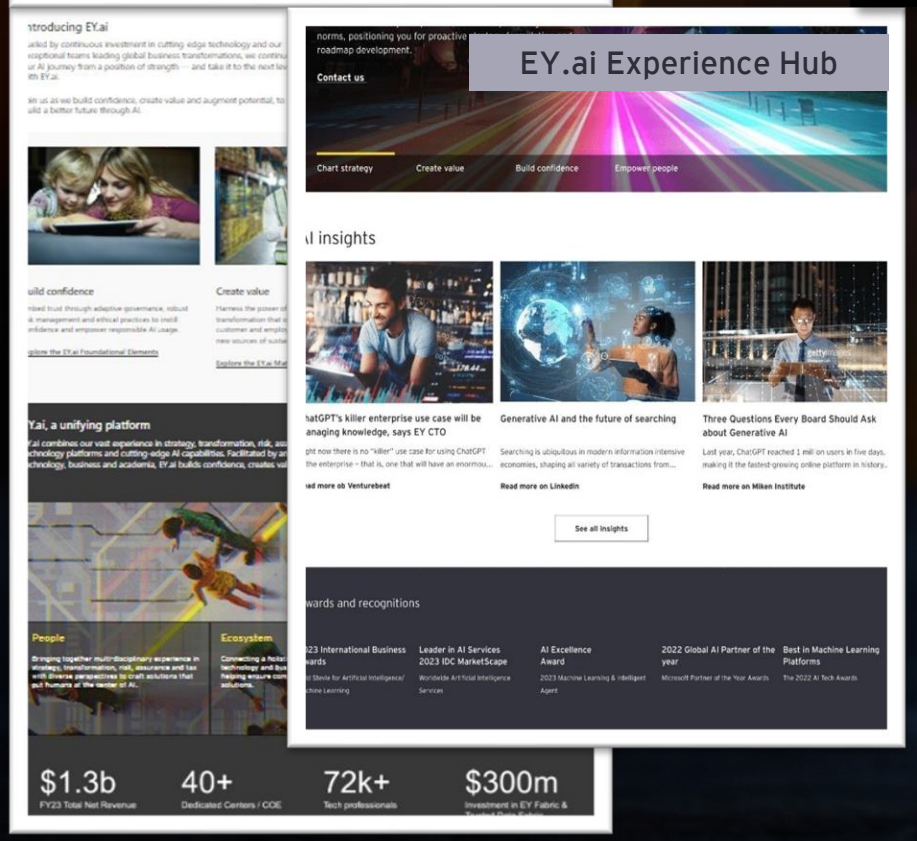
Measures of success

- Leading POVs per Industry
- Service Delivery reimagined
- Employee experience augmentation
- AI powered Functions
- Thought leader in public policy

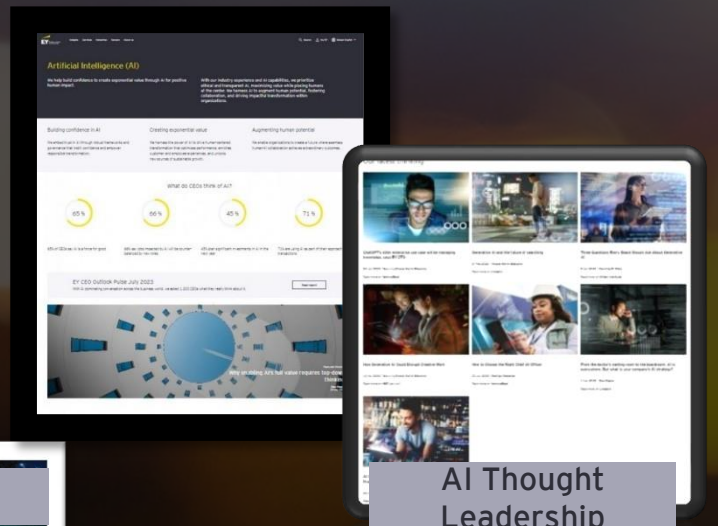
Now and Next for EY.ai

Internal EY.ai SharePoint

EY.ai Experience Hub



AI Thought Leadership



AI Use cases

AI Learning

FOR ALL
Let's Talk AI

FOR ALL
AI Badges

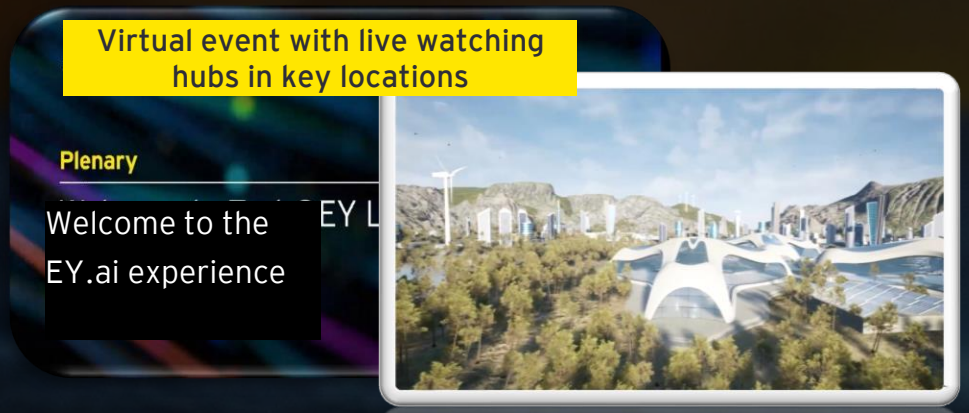
FOR PPEDDs
AI Series

FOR KEY PARTNERS
AI Global Exec Program

FOR G360 GCSPs & CLIENTS
AI G360 Client Program

EY.ai LLM

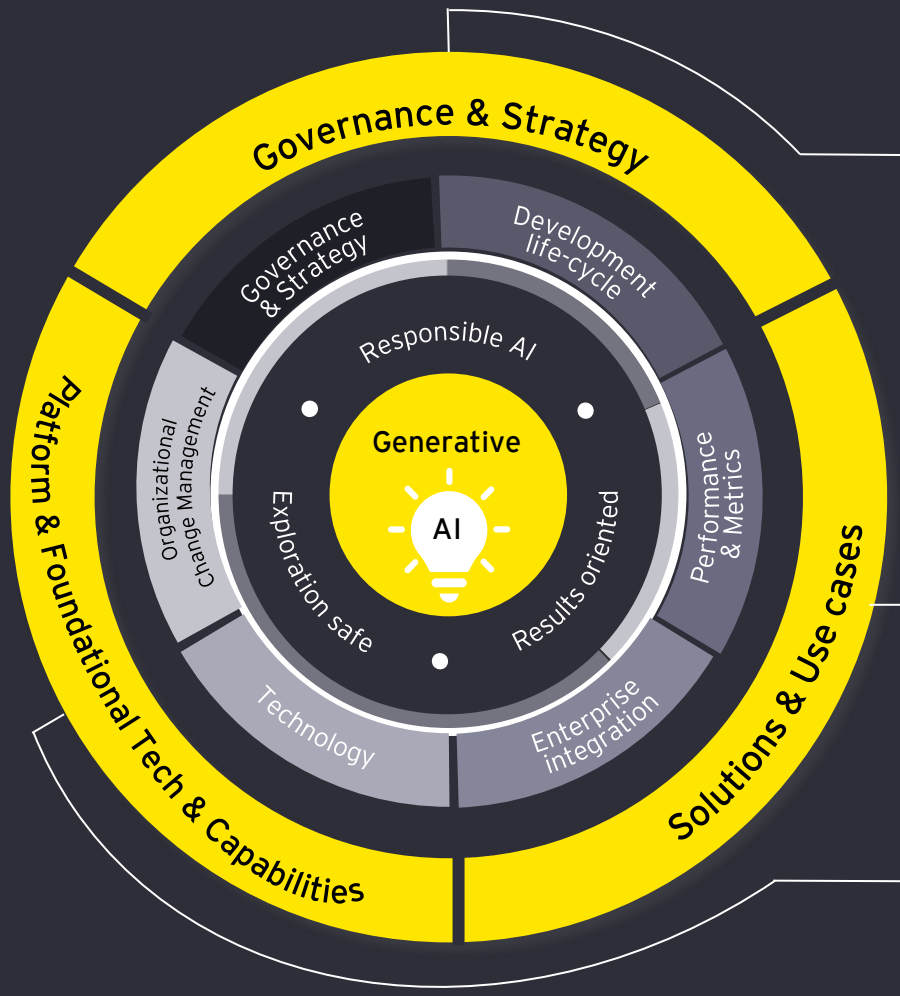
Virtual event with live watching hubs in key locations



Light up GenAI: our value proposition

EY's framework to help our clients adopt trustworthily Generative AI @scale and @speed

Synchronized with global EY.ai unified platform



- ✓ Align Strategy and define Governance around GenAI.
- ✓ Keep it flexible and risk-basked.
- ✓ Define and implement transformation programs.

SYNC

EY.ai Confidence Index

Who: AI Solution leaders, C-suite, Boards

What: A solution level assessment gauging confidence in the inputs and outputs of the underlying AI model.
Instilling confidence in the data, model and process as well as outcomes of AI solutions improving value capture.

- ✓ Include sector-led and verticalized accelerators for identifying & prioritizing use cases and solutions aligned to the business strategy.

SYNC

EY.ai Value Accelerator

Who: CEOs & Boards

What: A framework to identify value creation opportunities in the enterprise that will drive measurable growth. Includes value creation and value capture levers across key business dimensions – driving growth and driving efficiency.

- ✓ Choose the Right IT Infra and develop talent to leverage OpenAI @Scale and @Speed.

SYNC

EY.ai Maturity Model

Who: CXOs & GCSPs

What: A framework for companies to benchmark where they are and what capabilities are required to progress.
Includes assessing maturity of functions and business as well as alignment of AI ambitions with core values of organization.

WHAT WILL BE THE IMPACT OF CHATGPT ON OUR BUSINESS?
THERE'S A LOT WE DON'T KNOW FOR SURE...
LIKE HOW MUCH OF WHAT IT SAYS IS MADE UP...
OR IF IT WILL TAKE AWAY OUR JOBS...
OR THE SECURITY RISKS...
OR IF IT COULD DAMAGE OUR REPUTATION...
WHAT DO WE KNOW FOR SURE?
ONLY THAT WE WANT TO ADOPT IT EVERYWHERE AS FAST AS WE CAN.
TOM FISH BURNE
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EY | Assurance | Tax | Transactions | Advisory

About EY
Replace this text with boilerplate copy, found on The Branding Zone, in the Signature, boilerplate and descriptor section. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi ad minim veniam, quis nostrud exercitation ullam corper suscipit lobortis nisl ut aliquip ex ea duncai consequat.

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