

Deloitte.



Deloitte Boardroom Programme
Tech Series - Part 2: Generative AI

Tuesday, 21 June 2023

Deloitte.



Generative AI

JUNE 2023



Why the Hype?

CANADA

'It's perfect': World's first generative AI-designed COVID drug to start clinical trials

Believed to be the world's first COVID-19 therapeutic created by generative AI, the drug will soon begin clinical trials, the Canadian-founded company announced

ARTIFICIAL INTELLIGENCE | MACHINE LEARNING

DeepMind CEO Urges Caution With AI

By Paul Mah on January 18, 2023



OPINION

Legal minefield awaits for businesses looking to use artificial intelligence

ARJUN GUPTA

SPECIAL TO THE GLOBE AND MAIL
PUBLISHED FEBRUARY 15, 2023

TECH • ARTIFICIAL INTELLIGENCE

The AI Arms Race Is Changing Everything

AI's exponential advancement could spur \$15.7T in economic growth by 2030

Article by Jacob Bourne | Mar 2, 2023

Report: AI is weapon of 'mass disruption'

Maria Korolov | February 23, 2023 | 2 Comments

Internet Sensation ChatGPT Crosses 1 Million Users In 5 Days

California-based OpenAI's newest prototype ChatGPT has left people wanting more

Features | February 3, 2023

Generative AI solutions like ChatGPT could worsen the spread of fake news, expert warns

ChatGPT has been hailed a silver bullet for a plethora of industries, but don't quit your day job just yet.

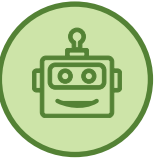
Eric Johansson

DAVOS 2023

Generative AI: a game-changer that society and industry need to be ready for

EVOLUTION OF AI

How did we get here?



EVOLUTION OF AI

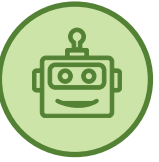
1997

Deep Blue (Explainable AI)

Deep Blue was a chess-playing computer that defeated world champion Garry Kasparov in a 1997 rematch, marking the first time a machine beat a human world champion.

**First AI win
against top
human talent**





EVOLUTION OF AI

2011

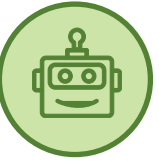
FEBRUARY

Watson (Explainable & Conversational AI)

Watson, an AI system developed by IBM, defeated Ken Jennings and Brad Rutter in Jeopardy in 2011, demonstrating advancements in natural language processing and AI capabilities.

First public instance of having a conversation with a computer





EVOLUTION OF AI

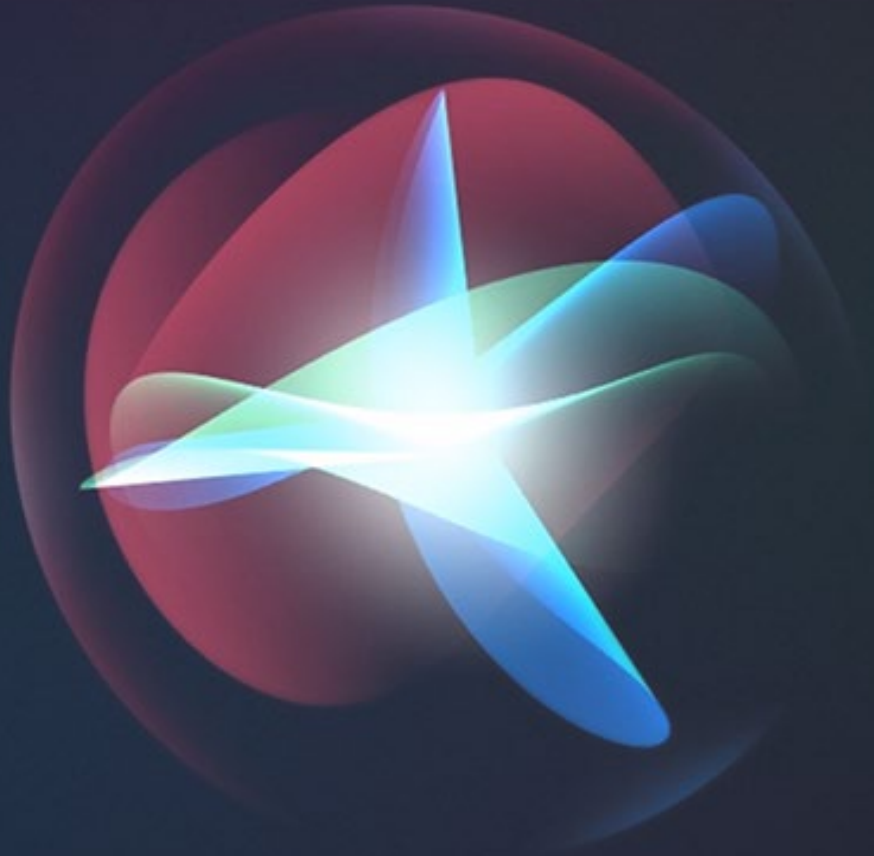
2011

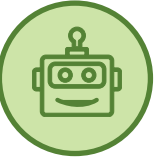
OCTOBER

Siri (Conversational AI)

Siri's release marked a significant milestone in voice assistant technology, paving the way for future advancements and popularizing the use of AI assistants in everyday life.

iPhone owners begin to leverage AI in their daily routines





EVOLUTION OF AI

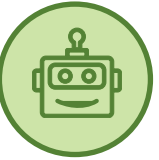
2014

NOVEMBER

Alexa (Conversational AI)

The release of Amazon's Alexa was significant as it marked the mainstream adoption of voice-controlled virtual assistants, transforming the way people interact with technology.

First home-based virtual assistant



EVOLUTION OF AI

2016

AlphaGo (Explainable AI)

AlphaGO was an AI program developed by Google DeepMind that defeated the world's best human players in the game of Go, showcasing the potential of AI.

First public demonstration of artificial creativity

"I thought AlphaGo was based on probability calculation and that it was merely a machine. But when I saw this move, I changed my mind. Surely, AlphaGo is creative."

Lee Sedol
Winner of 18 world Go titles



EVOLUTION OF AI

2022

OCTOBER



Lensa (Generative AI)

AI generated avatars made news as human users uploaded selfies to the program which generated images that morphed them into “Magic Avatars”.

First case of mass social media adoption of generative AI

EVOLUTION OF AI

2022

NOVEMBER

ChatGPT (Generative AI)

Within 5 days of its release 1 million users were testing out Chat GPTs ability to provide human-like answers in plain English, respond to follow-up questions and admit its mistakes.

**First
generative AI
tool that
cracked into
mass public
consciousness**

LS Introduce me to Chat GPT



Hello! I'm ChatGPT, a large language model developed by OpenAI. I'm designed to understand natural language and generate human-like responses to a wide range of questions and prompts. I use a form of artificial intelligence called "deep learning" to analyze and understand the patterns and relationships in the language that I'm trained on, which allows me to generate responses that are contextually relevant and often quite fluent. My training data includes a vast array of text from across the internet, which means I'm knowledgeable about a wide range of topics and can answer a broad range of questions. I'm always here to help, so feel free to ask me anything!



The future is still unfolding



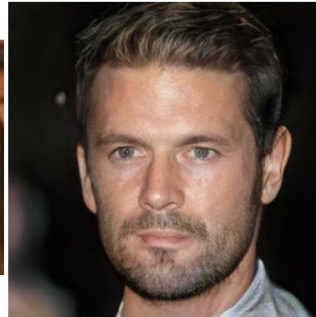
2014



2015



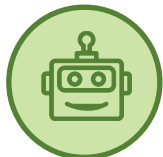
2016



2017

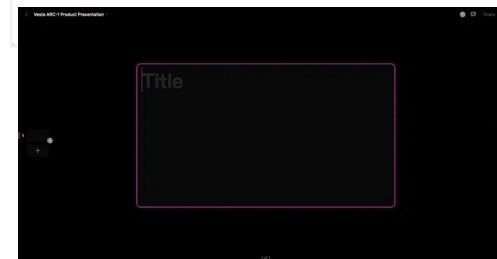


2018



Synonyms

Besides improving your health, laughter can also lead to increased creativity and productivity.



2023

How Generative AI works



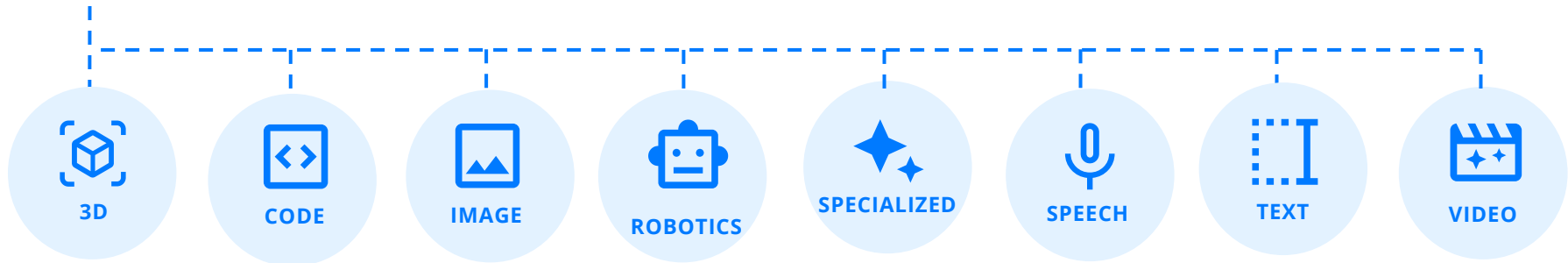
The AI is trained on a Large Language Model



The user submits a prompt



AI generates new data



Primer

Generative AI Ecosystem

A few players have large foundational models

 Microsoft

 OpenAI

 Google Cloud

 DeepMind
An Alphabet Company

co:here

ANTHROPIC

 NVIDIA

 Meta

stability.ai

And it's a busy application landscape *

 Jasper

Adept

 wordtune

 Playground

 Debuild

 synthesia

 COMPOSE AI

copy.ai

 RESEMBLE.AI

 tabnine

 Mintlify

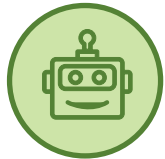
Plus, hundreds more

*logos are not exhaustive

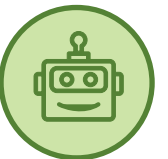
MISCONCEPTIONS

Common Misconceptions about Generative AI

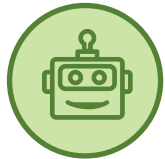
**“Generative
AI will replace
Human
Creativity”**




**“It is quick
and easy
to deploy”**

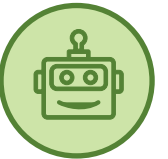


**“AI is going to
take over the
world.”**





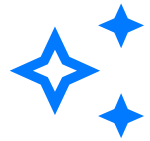
**“It’s accurate
and unbiased
because it’s
based on
data”**



BENEFITS & RISKS

Exploring the Benefits and Risks of Generative AI

Benefits & Risks



Benefits

There are many ways that generative AI can create both value and efficiencies



Risks

With any technology, generative AI can pose certain risks to be aware of



Accelerate
Content Output



Increase Task
Automation



Drive Cost
Efficiencies



Improve Customer
Experience



More Decision-
Making Inputs

Benefits & Risks



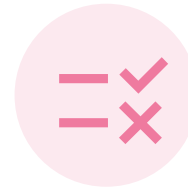
Benefits

There are a number of ways that generative AI can help improve our lives



Risks

With any technology, generative AI can pose certain risks to be aware of



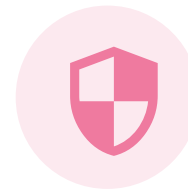
Inaccuracy



Bias



IP Violation



Privacy



Unethical
Use

Generative AI Lab

The lab aims to delve into Generative AI and its implications for your organisation, fostering collaboration with seasoned AI specialists and strategists who will guide you in envisioning the transformative potential of this technology.

Deloitte aims to create an environment where no question remains unanswered, in order to leave you equipped with a practical direction to steer your company confidently into the future.

Our objective is to provide a tangible action plan that enables leadership to spot the opportunities and challenges emerging within the industry, empowering them to make informed strategic decisions.

2 HOURS

Understanding generative AI

Getting your hands dirty

- Introduction to generative AI, incl. ChatGPT/GPT-4
- Hands-on experience with Generative AI
- Views of the future, how your industry be impacted
- Risks and ethical considerations

2 HOURS

Define the impact

Define strategic imperatives

- Explore the opportunities and threats to your industry, value chain and company (use cases)
- Define 100 day plan to start building a generative AI capability



Thank you!



At Deloitte, we make an impact that matters for our clients, our people, our profession, and in the wider society by delivering the solutions and insights they need to address their most complex business challenges. As the largest global professional services and consulting network, with over 415,000 professionals in more than 150 countries, we bring world-class capabilities and high-quality services to our clients.

In Ireland, Deloitte has over 3,000 people providing audit, tax, consulting, corporate finance financial advisory, and risk advisory services to public and private clients spanning multiple industries. Our people have the leadership capabilities, experience and insight to collaborate with clients taking them wherever they want to go.

This document has been prepared by Deloitte Ireland LLP for the sole purpose of enabling the parties to whom it is addressed to evaluate the capabilities of Deloitte Ireland LLP to supply the proposed services.

This document is not an offer and is not intended to be contractually binding. Should this proposal be acceptable to you, and following the conclusion of our internal acceptance procedures, we would be pleased to discuss terms and conditions with you prior to our appointment and no reliance may be placed for any purposes whatsoever on the contents of this document.

Deloitte Ireland LLP is a limited liability partnership registered in Northern Ireland with registered number NC001499 and its registered office at 27-45 Great Victoria Street, Lincoln Building, Belfast, BT2 7SL, Northern Ireland.

Deloitte Ireland LLP is the Ireland affiliate of Deloitte NSE LLP, a member firm of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”). DTTL and each of its member firms are legally separate and independent entities. DTTL and Deloitte NSE LLP do not provide services to clients. Please see www.deloitte.com/about to learn more about our global network of member firms.

The Deloitte Ireland LLP privacy notice is available at www.deloitte.ie/privacy

© 2023 Deloitte Ireland LLP. All rights reserved