Generative AI and it's Impact



Tanweer SurveCloud Control Management







AI and Applicability

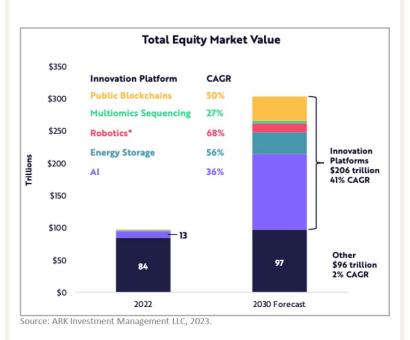
What **Traditional programming** Computation Results **Machine Learning Approach** Computation Program Results Programs with the ability to learn and reason like humans MACHINE LEARNING Algorithms with the ability to learn without being explicitly programmed DEEP LEARNING Gen Al

Why

- Accelerate Automation
 - Reduce human errors
 - Improve cost of repetition
- Improved creative productivity
 - Content creation
- Better Decisions
 - Deep data analysis
 - Efficient forward projections
- Help solve complex problems
 - Next gen privacy controls
 - Cyber defense (and offense)

When

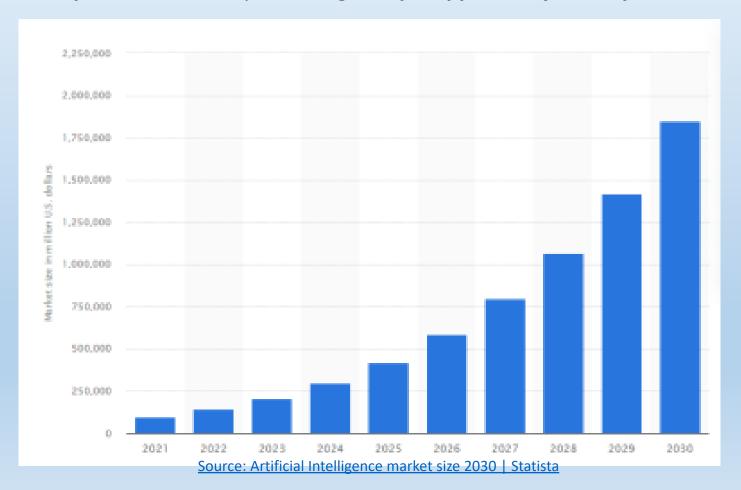
Now would be good.



Soon, AI driven businesses will be most of the market value.

The AI market is growing exponentially

Globally, All is expected to be a \$2T business by 2030, with chatbots, image processing and mobile applications among the major trends, and representing a major opportunity for major verticals in human centered products.



"The development of **AI** is as fundamental as the creation of the microprocessor, the personal computer, the Internet and the mobile phone."

Bill Gates, Co-Founder of Microsoft

ChatGPT – What is it and where it fits in the AI spectrum?

CHATGPT

- ChartGPT is A chatbot launched by OpenAI in November 2022 that recorded 1M users in a week from launch
- It is powered by Microsoft Azure; Microsoft invested \$1B in OpenAl in 2019 and \$10B in 2023
- It builds upon GPT-3 family, a large Language Model (LLM) that uses a massive amount of data to generate humanlike text

LLMs

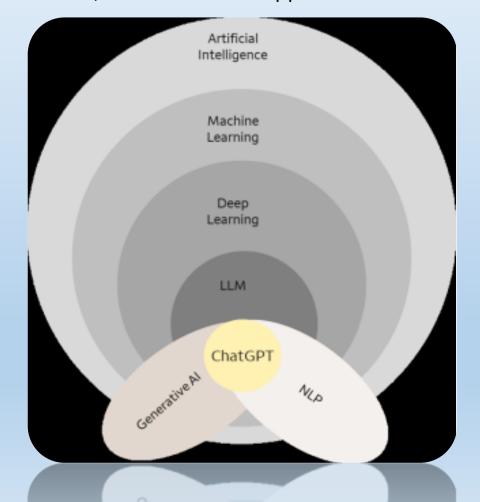
- LLMs take advantage of self-supervised learning and can learn from large amounts of unstructured and unlabeled text data
- These models are trained on large corpora of data, allowing for one model to be used for multiple use cases
- GPT 4 is an example of LLM (released by OpenAI in March 2023), specifically, a large multimodal AI model that can accept both text and image inputs; other open source LLM examples: LLaMA, etc.
- These models are a case of Generative AI

Generative Al

- Generative AI is the AI that can generate new content (in the form of images, text, audio, and more) instead of simply analyzing and regenerating existing data
- Illustrative Examples: LLMs (ChatGPT) to art generation (Jasper Art AI)

ChatGPT is a manifestation of Generative AI, which is the next generation of AI that will fundamentally change how we work.

With the rapid advancements in various AI disciplines, AI applications empower organizations to reimagine business models, develop groundbreaking products and services, and create new opportunities.



Accelerating Technology Convergence

Increased adoption and investment in AI will propel the permeation of technology into traditional industry, as it paves the way for innovation across sectors.

Adoption is on the Rise:

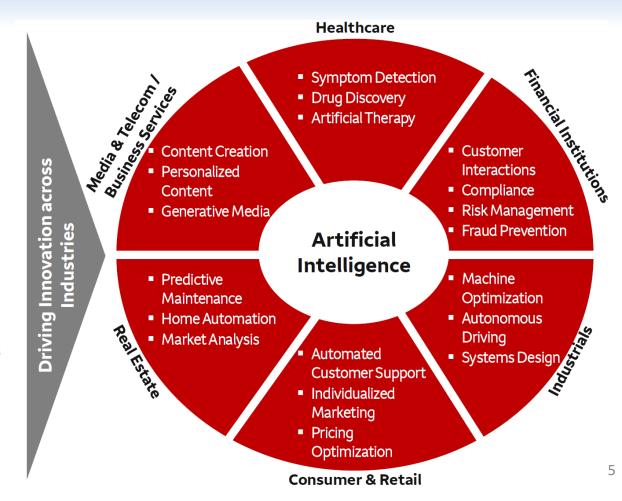
- In 2022, ~**50**% of organizations reported using AI, up from ~**20**% in 2017
- Organizations have embedded ~4 AI capabilities within operations

Corporates will Continue to Invest:

- Global AI investment to grow from ~\$150B in 2023 to ~\$550B by 2026 (~27% CAGR)
- ~47% of Tech leaders across industries say AI is their #1 budget item over the next year

Banking and Retail to Lead the Way:

- Banking #1 investor in AI during 2023, contributing ~13.5% of total spend
- Retail #2 investor in AI during 2023, with ~13.0% of total spend



Industry Specific Applications and Use Cases

Every industry—and business—will find its own custom applications of generative AI technology



Consumer goods and retail

- · Providing virtual fitting rooms
- · Scheduling delivery and installation
- Providing in-store product-finding assistance
- Optimizing demand prediction and inventory planning
- Generating novel product designs



Manufacturing

- Serving as expert copilot for technicians
- Allowing conversational interactions with machines
- · Providing prescriptive and proactive field service
- Enabling natural language troubleshooting
- Assessing warranty status and documentation
- Understanding process bottlenecks and devising recovery strategies



Media and entertainment

- Providing intelligent search and tailored content discovery
- · Writing engaging headlines and copy
- · Providing real-time feedback on content quality
- Curating personalized playlists, news digests, and recommendations
- Enabling interactive storytelling, driven by viewer choices
- Delivering targeted offers and subscription plans

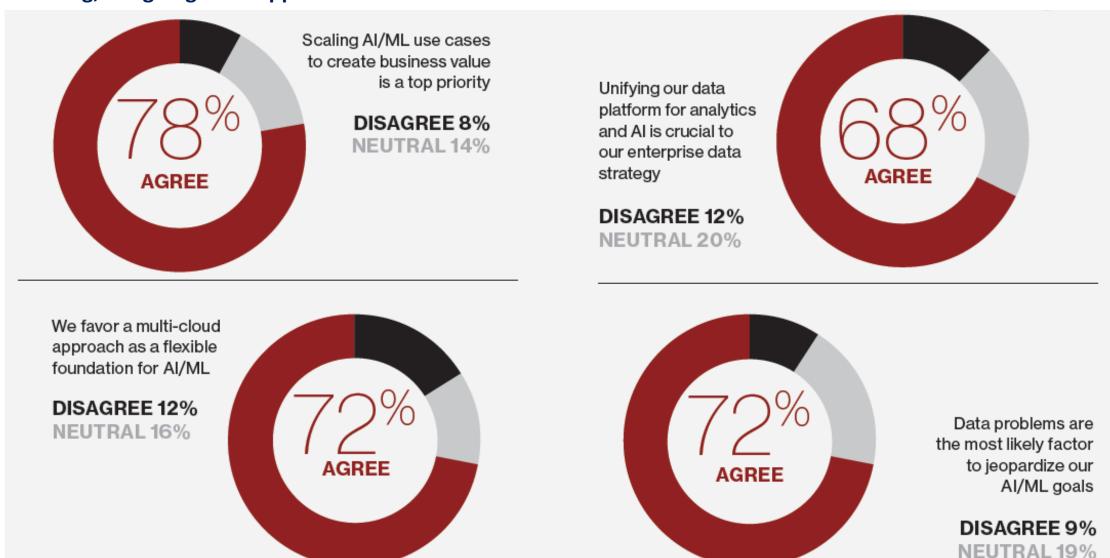


Financial services

- Uncovering potential trading signals and alerting traders to vulnerable positions
- · Accelerating underwriting decisions
- · Optimizing and rebuilding legacy systems
- Reverse-engineering banking and insurance models
- · Monitoring for potential financial crimes and fraud
- Automating data gathering for regulatory compliance
- Extracting insights from corporate disclosures

AI Priorities for Executives

In the next five to ten years we will see how quickly we can adapt, and companies that fail to adapt, no matter how big, are going to disappear.



Why Data and AI?

Organizations recognize that data & AI are catalysts for enterprise reinvention, but also know there's work ahead to fully capitalize on data & Al's potential.

97%

93%

of executives said generative AI will be transformative to their company and industry.

67%

of organizations plan to increase their level of

spending in technology and are prioritizing investments in data & Al.

95%

of executives surveyed support some level of government regulation around AI.

of organizations are increasing their investment as a % of revenue (an increase from 89% over the last 3 months).

56%

of respondents acknowledge data readiness is the top challenge to adopt AI.

7 in 10

organizations have specific training programs planned for 2023 to ensure workers are prepared to use generative AI tools.

Source: CxO Pulse Survey

Reinvent the Enterprise with Generative Al

Why Generative AI matters?

97%

of organizations expect gen Al to be transformative but only 31% have invested significantly 63%

say at least half their workers have received AI training but only 5% have reached the full workforce 47%

of CXOs say data readiness is the top challenge with applying generative Al

2%

Only 2% of companies have identified as having fully operationalized Responsible Al across their organization, with a further 31% expected to do so in the next 18 months

Key Takeaways: What you can do?

Lead the Value Understand and develop an AI-enabled secure digital core Reinvent talent and ways of working 3 Close the gap on responsible Al **Drive continuous reinvention** 5

