

AI Trends

Trending Topics Report
AUGUST 2023

AI Topics



Shoppers/Consumers



Workplace



CPG



XXXX



XXXX



XXXX



"Our intelligence is what makes us human, and AI is an extension of that quality. Artificial intelligence is extending what we can do with our abilities. In this way, it's letting us become more human."

- Yann LeCun

AI SHOPPERS/ CONSUMERS





Half of US adults familiar with **artificial intelligence**

Higher than other new tech concepts

ANY LEVEL OF FAMILIARITY:

The concept of artificial intelligence

55%

Cryptocurrency

42%

Metaverse

39%

Augmented Reality

34%

NFTs (Non-Fungible Tokens)

29%

Web 3.0

15%

DAO (Decentralized Autonomous Organizations)

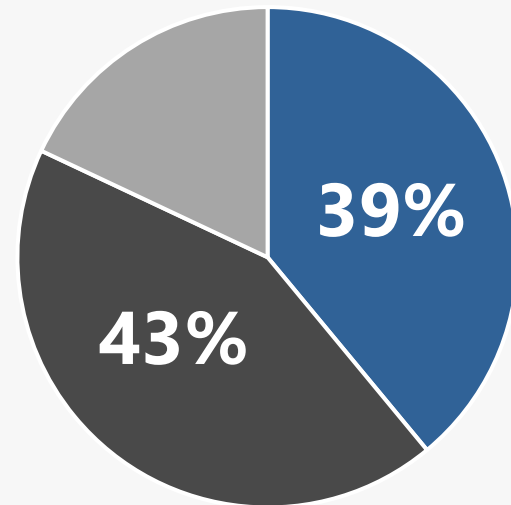
10%

Americans divided on **view of AI**

Do you have a favorable or unfavorable opinion of the following?

AI (ARTIFICIAL INTELLIGENCE)

■ Favorable ■ Unfavorable ■ Don't know/
Not familiar/Skipper



Source: IPSOS. Conducted April 20–24, 2023. Base size: All Americans (N=1,008)





Most think AI will **impact society** significantly

55%

55% think AI will be another piece of technology among many

36%

36% thinks AI will fundamentally change American society

6%

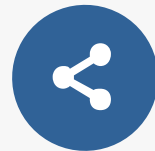
Only 6% think AI won't have much of an impact on society



Government Role

44% think it's the responsibility of the government

64% the government should take action to prevent the potential loss of jobs due to AI



Private Sector Role

53% think it's the responsibility of the companies developing AI

Americans don't fully trust companies to develop AI systems with the public's well-being in mind

- **25%** have somewhat or a great deal of trust
- **75%** have little to no trust

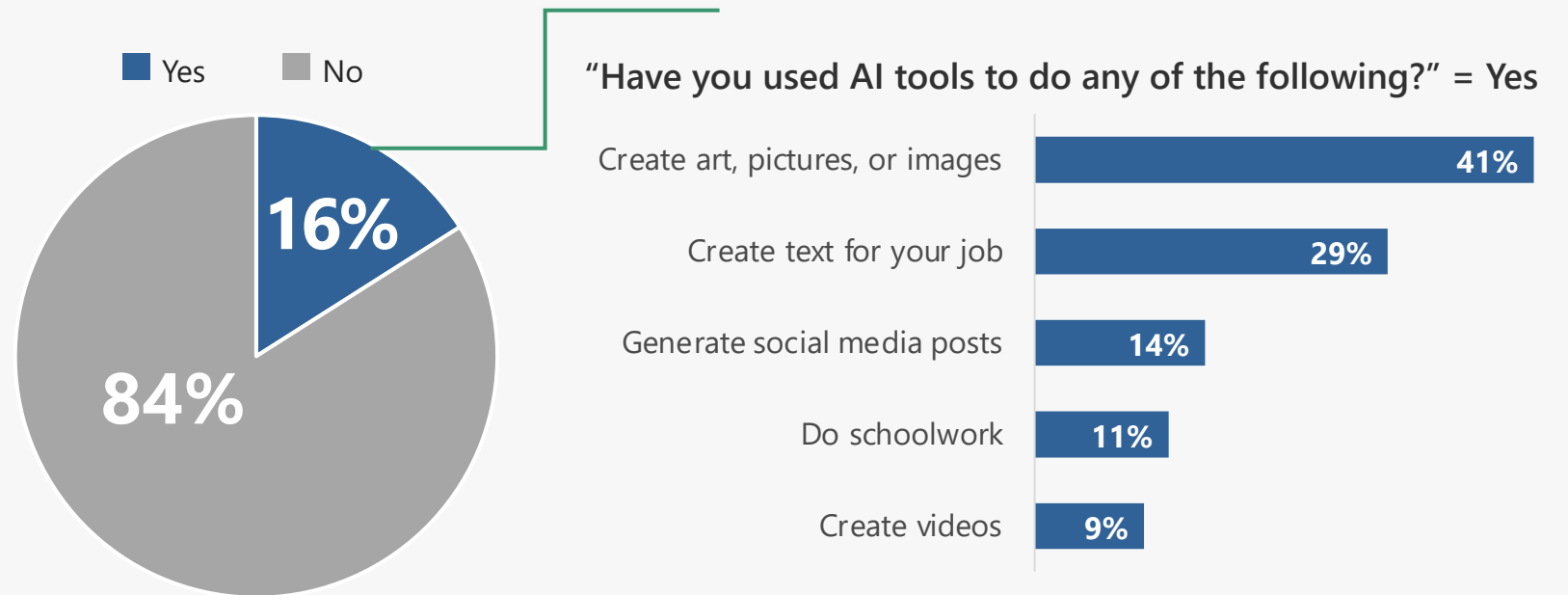
Three in four (74%) Americans say the tech industry generally has a good impact on the lives of average Americans

Americans disagree on **who should regulate AI**



16% of Americans have used generative AI systems

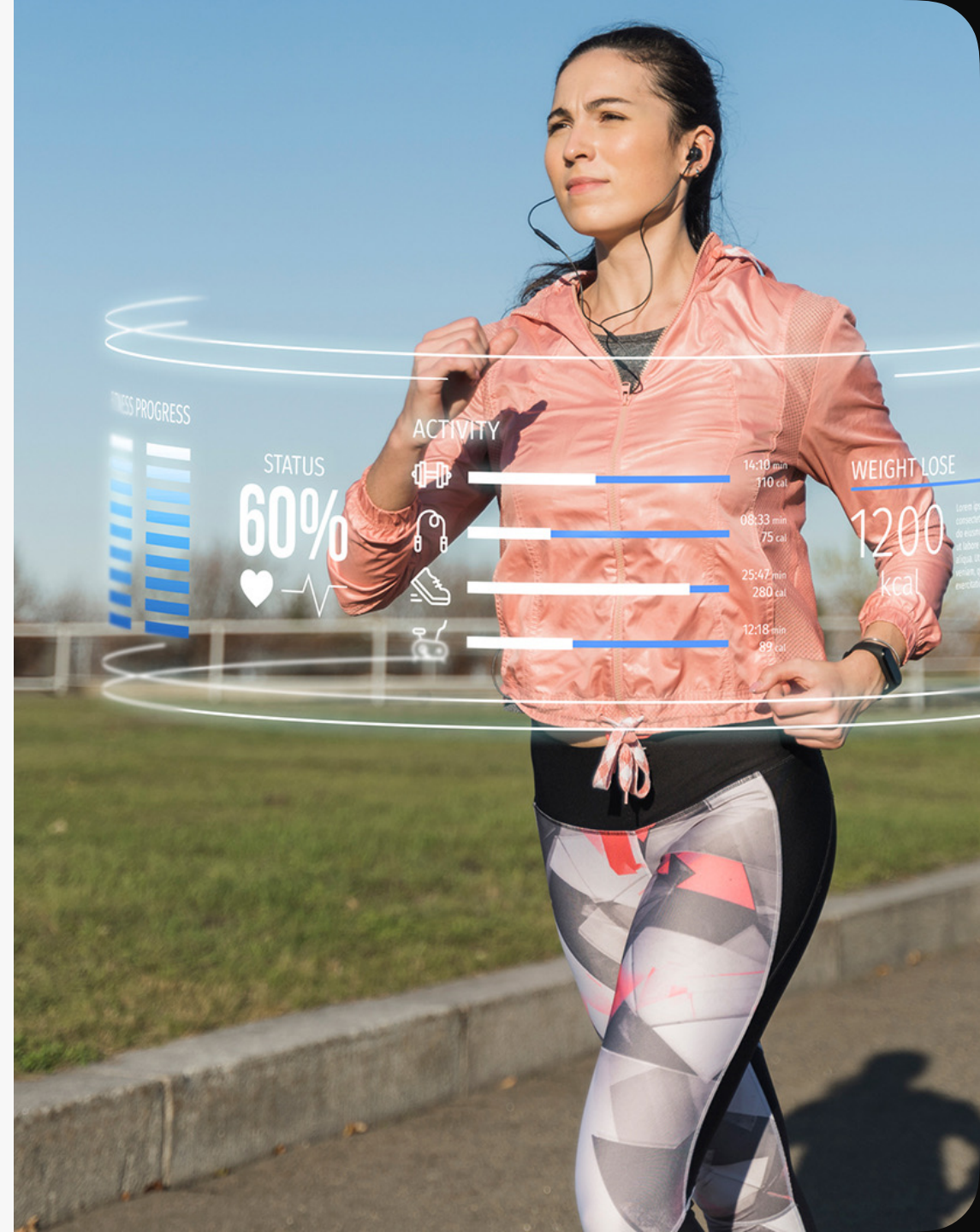
"Have you ever used a generative AI system, either text-based or visual (i.e., ChatGPT, Bard, Stable Diffusion, Midjourney, DALL-E)"



Majority aware of AI use in existing **everyday activities**

However, only 30% of US adults are aware of AI's role in all 6 of these activities

% of U.S. adults who identify that the following use artificial intelligence in multiple choice questions





AI WORKPLACE

As more become familiar with AI, there's potential for **increased confidence**

ANY AGREE:

62%

"Using AI in the workplace can save time and resources"

- 16% Strongly agree
- 46% Somewhat agree

56%

"AI-generated written work may contain biases or inaccuracies"



A close-up of a woman's face, partially obscured by digital data projections. The projections consist of glowing green and blue lines and dots, resembling a digital grid or data stream, overlaid on her skin. She has short, wavy blonde hair and is looking slightly to the side.

**Half expect
AI to change
their job in
the next 5
years; Quarter
expect to be
replaced by AI**

AI technology is already widely used in the workplace, but some fear that AI will render workers and their skills irrelevant

ANY AGREE: IT'S LIKELY AI WILL:

46%

Change their jobs in the next 5 years

27%

Replace their current job in the next 5 years

38%

However, 38% feel AI will create new jobs and opportunities to make up for the jobs that are lost

Executives expect both positive and negative impact from generative AI

Source: KPMG – “Generative AI Has an Increasing Effect on the Workforce and Productivity”; Base 225 US executives 05.01.2023



Positive

76% believe IT and software jobs will witness a positive impact with a widescale adoption of generative AI

72% said generative AI could play an important role in increasing productivity

62% felt AI would encourage innovation and help in creating more products and services



Negative

88% of the respondents don't think their workforce is prepared to adopt generative AI

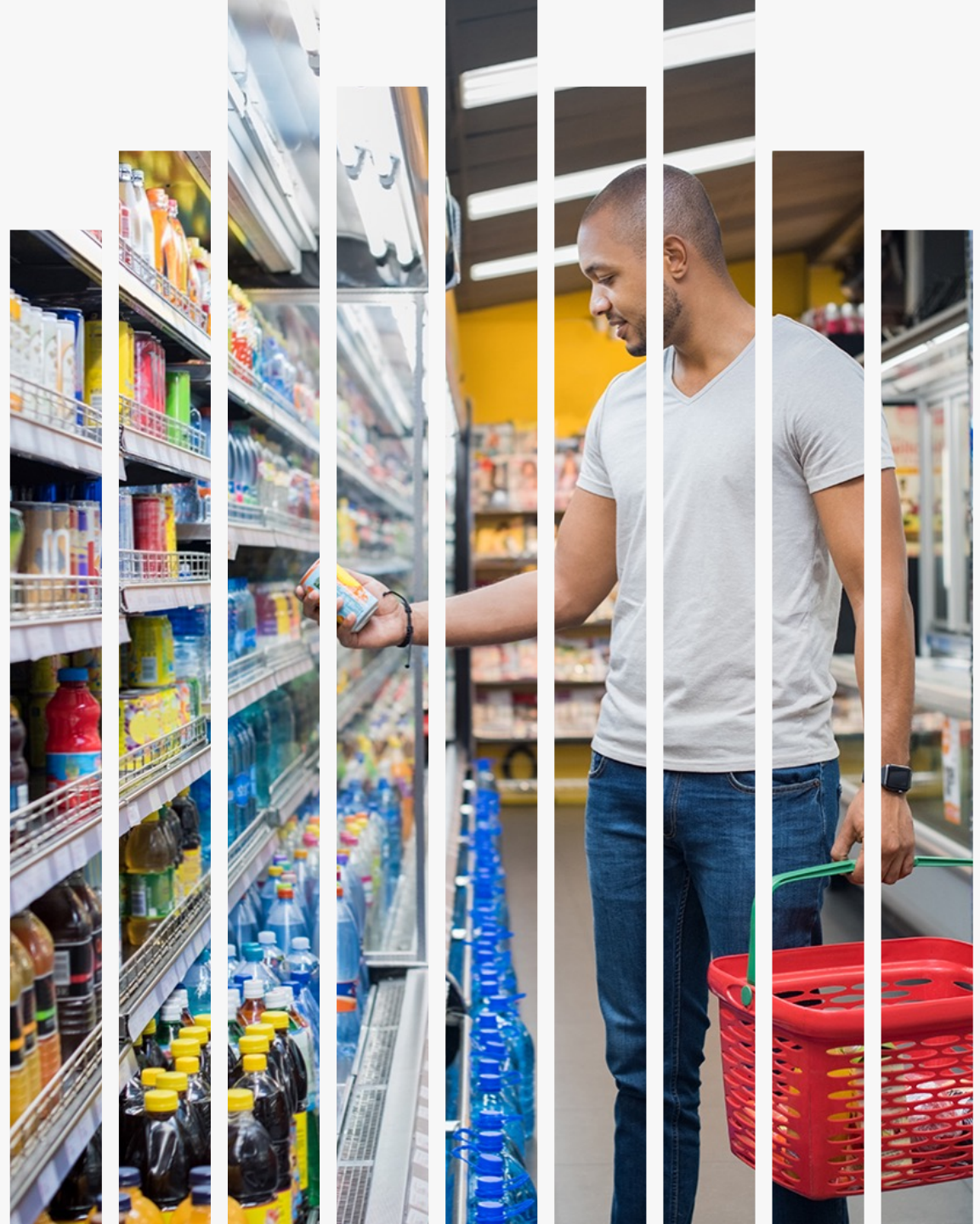
71% of executives believe the IT/Tech function will need to hire as well as train employees for a smooth implementation of generative AI

47% expect decreased job security

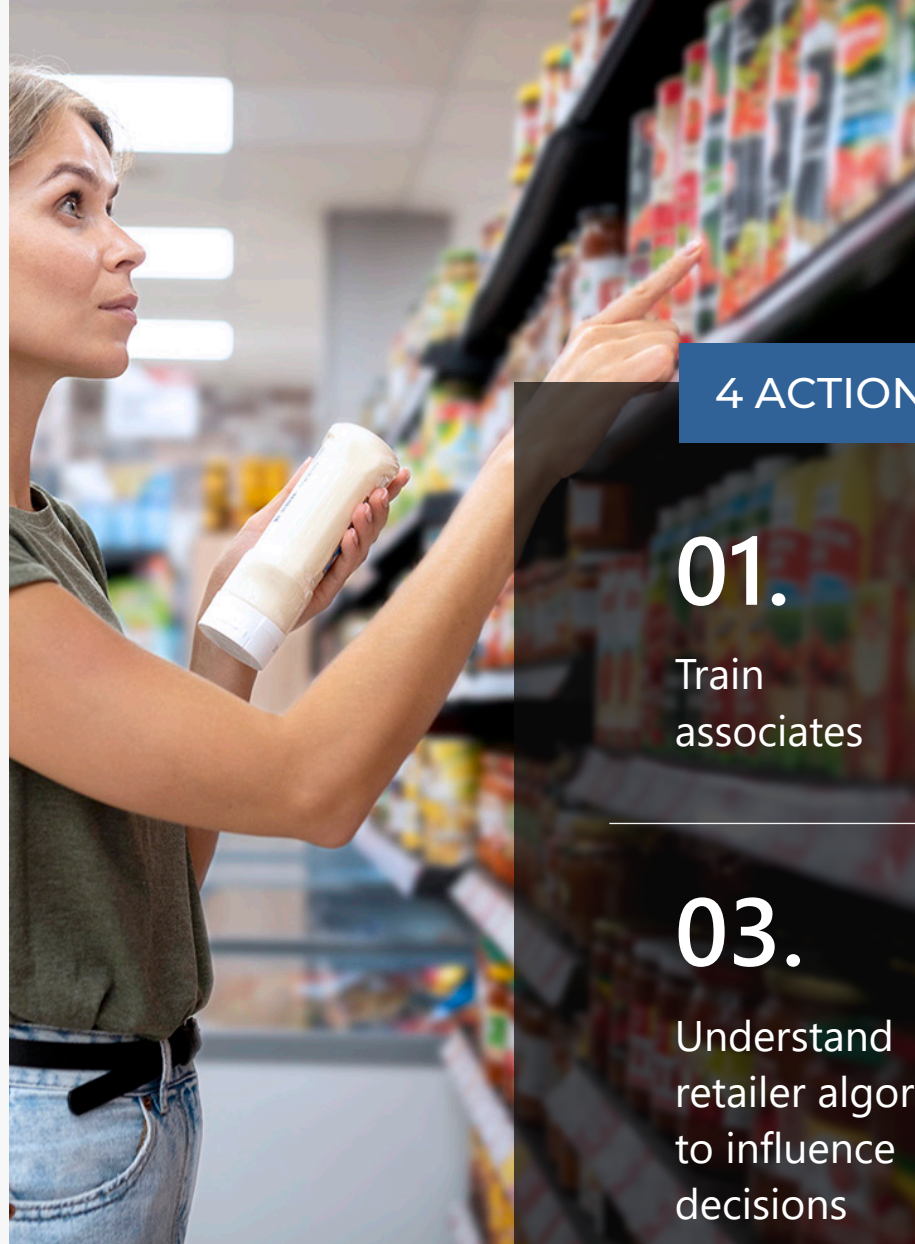
39% believe AI would increase antisocial behavior in the office setup



AI CPG



CPGs should leverage **generative AI** to influence retailer and shopper decisions



4 ACTIONS FOR CPG COMPANIES

01.

Train
associates

02.

Identify, collect and
catalog retailer AI uses

03.

Understand
retailer algorithms
to influence
decisions

04.

Integrate AI into
customer data platforms
to efficiently understand
how your customer thinks



88% of food retailers use technology to personalize shoppers' experience

31% use AI

Current Uses

- Leveraging customer data
- Making pricing decisions
- Making promotion decisions

Potential Uses

- Improving process automation
- Customer engagement
- Security/anti-fraud



86% of grocers think AI will impact **inventory forecasting and optimization**

67%

of grocers have discussed ChatGPT in senior-level meetings over the past year

82%

say AI will be necessary to compete in the future

13%

say they plan to spend non-budgeted funds developing AI solutions in 2023

AI offers solutions across a variety of CPG industry needs



Marketing

- Customize product design
- New product development
- Photography and 3D rendering generation
- Marketing/sales content creation
- Customer sentiment classification
- Generate personalized targeted ads



Customer Experience

- Live customer FAQs
- Help customers find items in-store
- Answer product questions in real-time



Security

- Minimize front-end theft and weapon risk
- Minimize fraud
- Simulated safety testing
- Automated code debugging



Resource Maximization

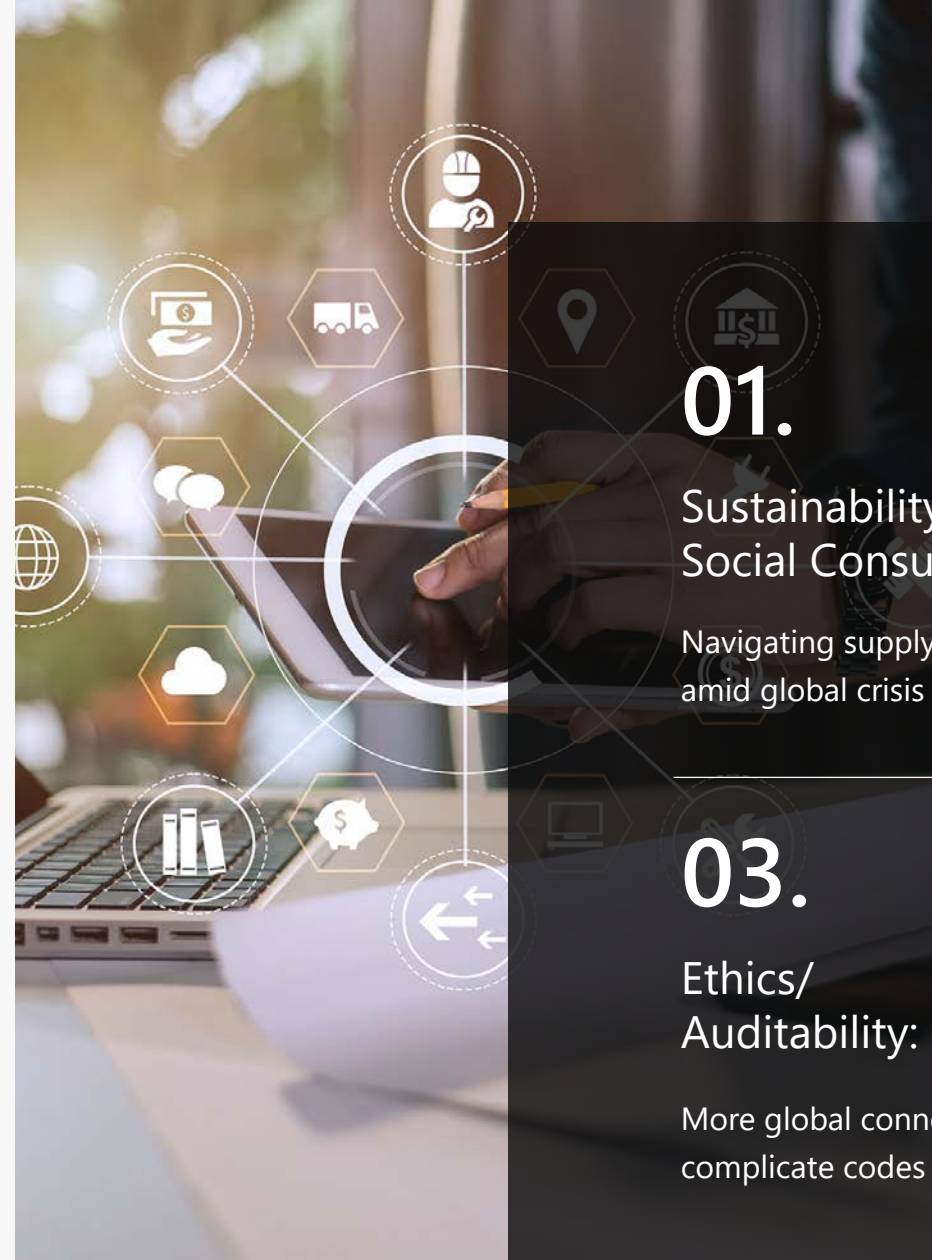
- Improve process automation
- Fill labor voids
- Fulfill redundant tasks
- Maximize HR and IT functions



Decision Making

- Analyze large quantities of customer data
- Make decisions on pricing and promotion
- Forecasting and predictive modeling
- Financial reporting analysis
- Infrastructure mapping

Top factors driving CPG interest in AI



01.

Sustainability/
Social Consumerism:

Navigating supply chain
amid global crisis

02.

Digital Transformation/
Customer Experience:

Consumers have increased digital
expectations and reduced patience

03.

Ethics/
Auditability:

More global connections
complicate codes of conduct

04.

New Retail Landscape/
Omnichannel:

Rapidly changing marketplace
brings new opportunities





- Fairness
- Intellectual Property
- Organizational Impact
- Security
- Explainability
- Reliability
- Privacy
- Social and Environmental Impact

Understand risk of incorporating AI into business practices



Tech experts split on human control of AI

44% say they will

- Humans and tech positively evolve for the majority
- Marketplace demands businesses protect human agency
- Expect cycle of both more and less human agency

56% say they will not

- Little incentive to honor human agency
- Humans value and give into convenience
- AI is too confusing and overwhelming to enable user agency

"By 2035, will smart machines, bots and systems powered by artificial intelligence be designed to allow humans to easily be in control of most tech-aided decision-making that is relevant to their lives?"

Source: Pew Research Center – "The Future of Human Agency" 02.24.2023





Understanding AI definitions

Artificial intelligence (AI): The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Machine learning (ML): A subset of AI that focuses on developing algorithms and models that allow computer systems to learn and improve from data without being explicitly programmed. ML algorithms are trained on large datasets to identify patterns and make predictions or decisions. It is a key technology behind many AI applications, such as image and speech recognition, natural language processing, and recommendation systems.

Generative artificial intelligence (Generative AI): A subset of machine learning where algorithms (such as ChatGPT) are used to create new content, including audio, code, images, text, simulations, and videos based on pattern recognition



AI technologies offer benefits to the CPG industry



Demand forecasting



Product development



Personalization



Customer service
and support



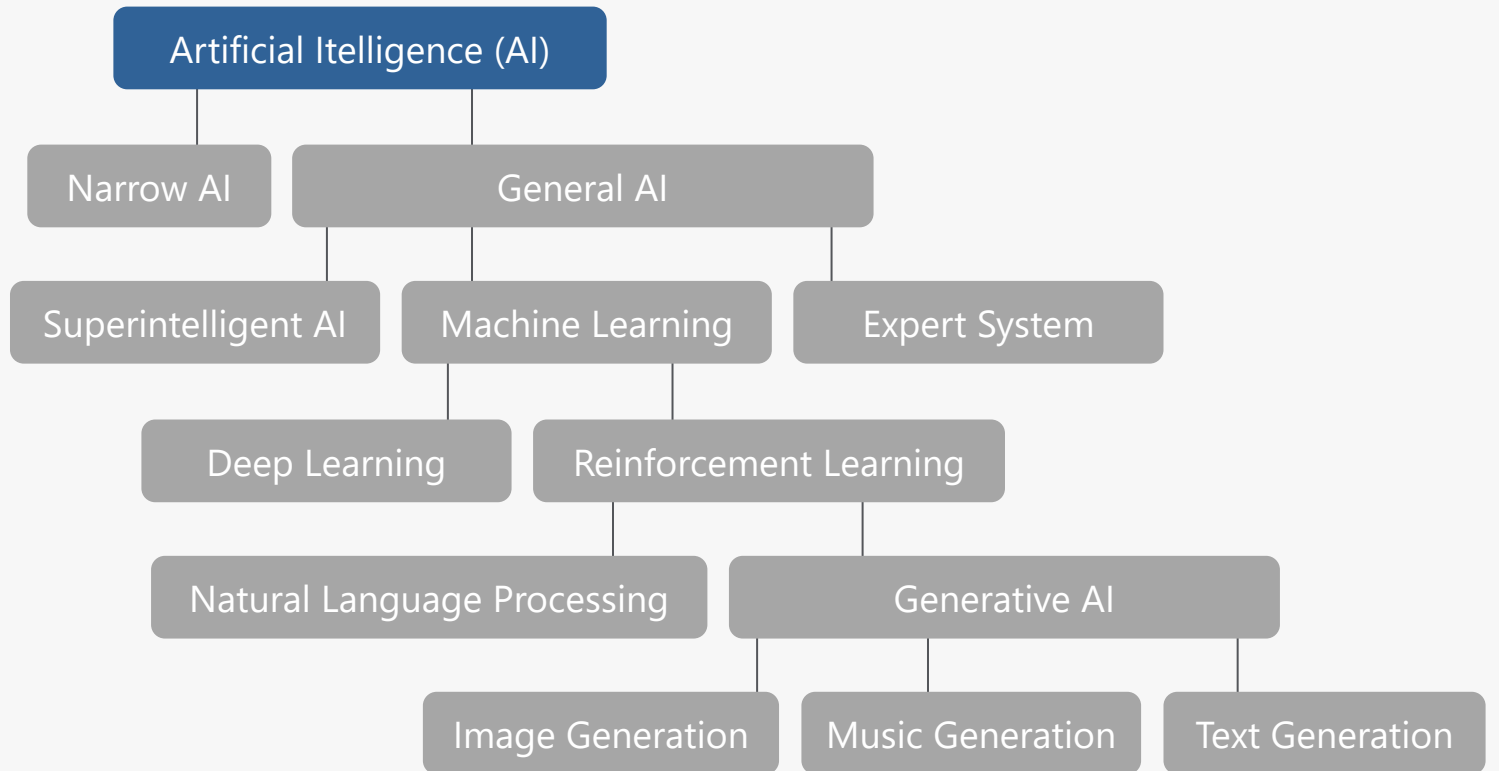
Supply chain
optimization



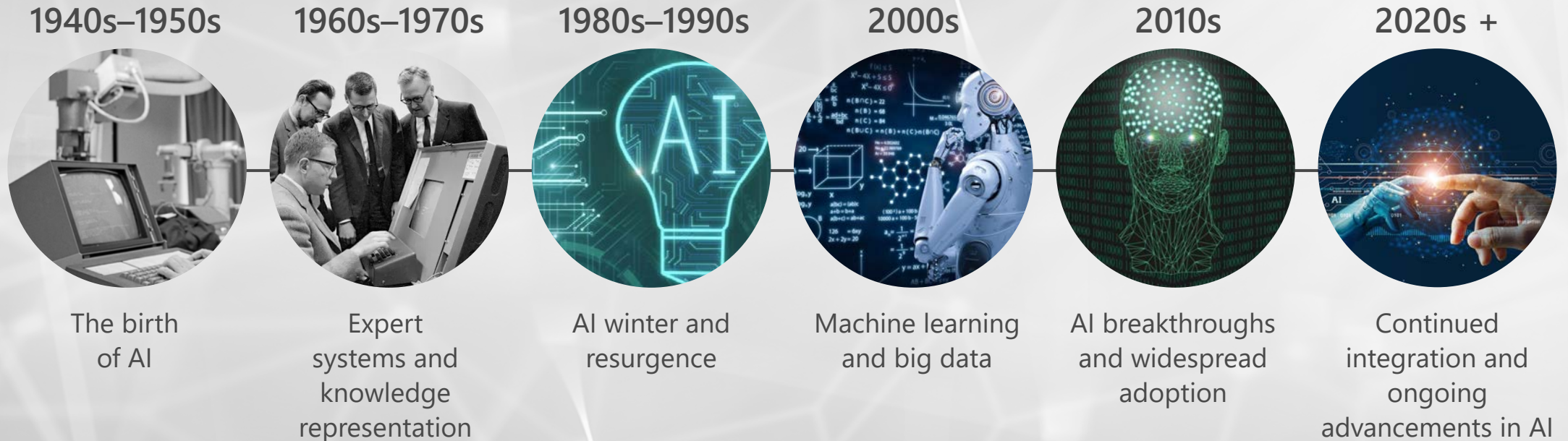
New product
development



Understanding AI



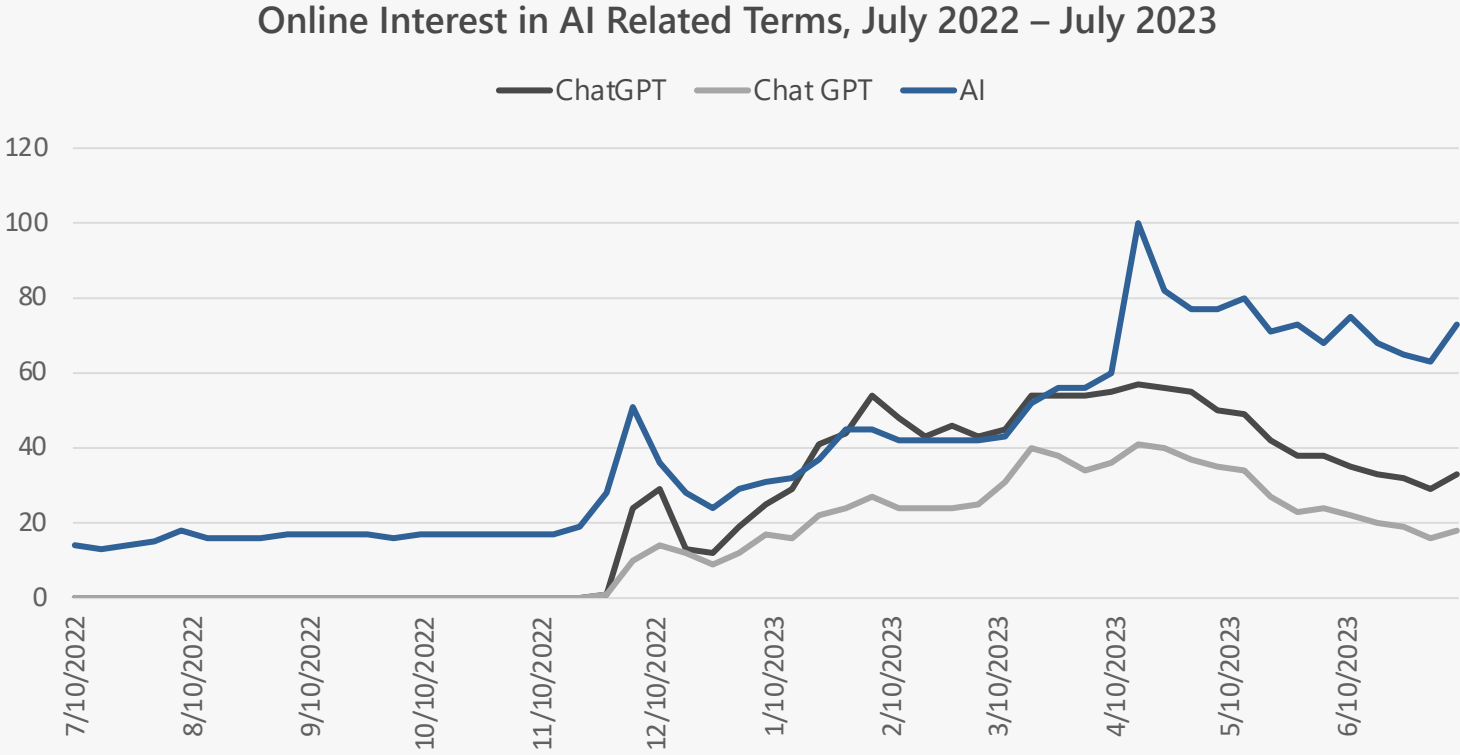
AI Timeline



Ongoing advancements in AI include:

- Reinforcement Learning
- Robotics
- Autonomous Vehicles
- Generative Models
- AI Ethics

Online interest in AI spiked in recent months





Instacart invests in AI-inspired initiatives

This technology helps with the shopping process seamless by helping shoppers discover new products, generate lists, and learn new cooking techniques

Instacart just launched *Ask Instacart*, an AI-powered search tool that can:

- Understand what ingredients or dishes pair well
- Discover alternative ingredients
- Learn cooking techniques
- Generate lists
- Learn about item attributes
- Discover inspiration from open-ended questions
- The function also matches consumer needs with brand partners' sponsored product campaigns

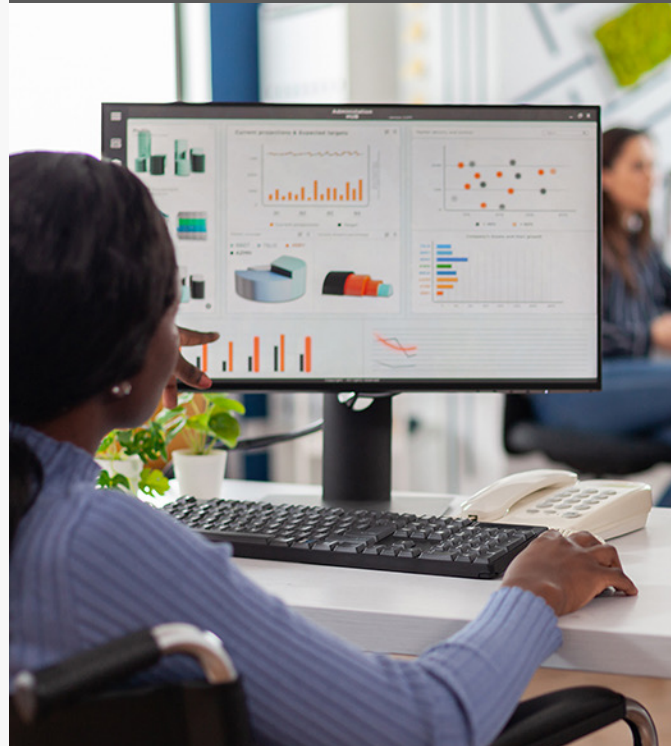
67%

have a good understanding of what artificial intelligence is



51%

know which types of products and services use artificial intelligence



Most feel they have a **good understanding** of the concept of AI

Many remain nervous about AI-based services

52%

say that products and services that use AI make them **nervous**

54%

agree that AI-based services have **more benefits than drawbacks** and the same percentage are excited about them

52%

are still nervous about AI-based products and services



Thank you.



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