

ART AND AI REPORT 2024



What is the future for producing and collecting AI-generated art?



Artificial Intelligence is all around us and there doesn't seem to be any facet in our lives where AI isn't going to play a role. At the moment, it's difficult to know whether it is a good, bad or indifferent development for the art market, but this report is a first step in trying to work that out. How can it replace the sweat, toil and tears of the lonely starving artist toiling away in their garret? How would it replicate the emotional journey that is a necessary part of the human creative process? Is there room for both human and AI-generated works and how can the two co-exist in harmony?

Not surprisingly, we find that younger collectors are currently much more prepared to embrace AI-generated works, but questions remain about the infrastructure that exists in the art market to protect the integrity of AI-generated works – issues such as transparency, compensation, and valuation, among others. Getting to the root of these and other issues will be an essential element in allowing AI-generated art to be a tradeable asset...but given how lightly regulated the art market is, establishing a credible marketplace may be a bumpy journey.

I hope you find the report interesting and we look forward to examining how this part of the art market develops in future reports.

Robert Read

Head of Art and Private Clients
Hiscox UK



INTRODUCTION

About this report

Artificial Intelligence (AI) has quickly become a part of everyday life and this new research by Hiscox, in partnership with ArtTactic, analyses the impact of AI on the art market.

This inaugural Hiscox Art and AI Report 2024 focuses on art buyers' and art lovers' perception of AI-generated art, and its value and potential as a collectible. Can AI-generated art ever be as important and valuable as art created by humans? We examine the relationship between the economic and cultural value of human versus machine creativity, as well as legal and ethical issues around authorship and intellectual property. We also look at how AI-generated art already co-exists with the traditional art market, as well as its potential to create new markets outside of the art market.

The findings are based on two studies conducted between April and June 2024 to capture the current sentiment and perception of AI-generated art among existing art collectors, and also art enthusiasts – a more general audience who express a broad interest in art. The purpose of polling these two groups was to provide insights into how AI-generated art is perceived differently as a collectible.

KEY FINDINGS

The market for AI art is yet to catch on, but more AI artists are coming to auction

The sale of Edmond de Belamy by Paris-based collective Obvious in 2018 marked a pivotal moment in the evolution of the market for AI-generated art, achieving \$432,500 at Christie's in London – a record price. Since then, the auction market for AI-generated art has been patchy. However, this year has already seen a renewed interest in AI artists, with auction sales of works by Sougwen Chung, Mario Klingemann, Harold Cohen, Anna Riddler, Obvious, Claire Silver and Roope Rainisto.

A new generation of collectors is likely to pave the way for AI art collecting

Although only 2% of traditional art collectors have bought an AI-generated artwork, 29% might consider buying one in the future. The interest in buying AI-generated art was higher among new collectors – that's those who have been collecting for fewer than three years – where 7% have already bought AI-generated art and a further 39% said they would consider doing so.

Art enthusiasts are already buying AI art

Over a quarter (28%) of art enthusiasts have purchased an AI-generated artwork, with a further 52% saying they might do so. This is likely to be due to the popularity of AI models that generate images from prompts, such as Stable Diffusion, Midjourney and DALL·E, as well as a growing number of websites and artists selling AI-generated art either as a physical artwork or as an NFT.

Seasoned collectors are sceptical about AI-generated art, but new collectors and art enthusiasts see value

Only 16% of art collectors believe AI-generated art could fetch the same price levels as traditional art created by humans, whereas 26% of new art buyers and 56% of art enthusiasts think it can.

Most collectors view AI-generated art as inferior to man-made art

A large majority of both older art collectors (69%) and younger collectors (67%) consider AI-generated art to be less important than human creativity. Yet only 44% of new collectors say the same, with 26% rating AI art to be of the same importance as traditional mediums such as paintings, sculpture, and photography.

Key obstacles exist around the development of an AI-generated art market

Most art collectors (61%) worry about AI-generated art's authenticity and originality, while a lack of emotional connection (i.e. the absence of a human hand in the work's creation) (60%) was another key concern that prevented them from buying. Ethical concerns also weigh on them, with 42% of art collectors saying they fear the impact that AI will have, particularly on human creativity.

Boom and bust

Almost half (45%) of art collectors are concerned about being caught out in a speculative bubble when it comes to AI-generated art, like the NFT boom which peaked in 2021-22.

Strong desire to clearly distinguish AI-generated from human-created content

Both art collectors (82%) and art enthusiasts (76%) want to tell AI-generated art apart from human-created content. Greater transparency in the role played by computers in making art will help to forge trust and could be an important factor in establishing a future market for AI-generated art.

THE EVOLUTION OF AI-GENERATED ART (1950s-2015)

1950s



The birth of AI. In 1950, the British mathematician Alan Turing wrote a paper called *Computing Machinery and Intelligence* in which he discusses how to build intelligent machines and how to test their intelligence. In 1955, Allen Newell, Cliff Shaw, and Herbert Simon a program called the *Logic Theorist* addressing Turing's theories, funded by the RAND Corporation, which mimicked the problem-solving skills of a human and was presented at a research workshop at Dartmouth College in 1956.

1960s (late)



Harold Cohen develops AARON, one of the first AI art systems, at the University of California at San Diego.

1970s



Vera Molnar's *Generative Compositions*, a series of computer-generated drawings that were created using simple algorithms and geometric shapes.

1980's



William Latham uses machine-learning algorithms to generate 3D graphics and animations.

1990s (early)



Karl Sims wins the Golden Nica award at *Prix Ars Electronica* for his 3D AI-animated videos using artificial evolution.

2001



Scott Draves wins the *Fundacion Telefonica Life 4.0* prize for *Electric Sheep*, which uses AI to create an infinite animation by learning from its audience.

2009



Eric Millikin wins the *Pulitzer Prize*, along with several other awards, for his artificial intelligence art about Detroit.

2014



Ian Goodfellow and colleagues at *Université de Montréal* develop the generative adversarial network (GAN).

2015



Google released *DeepDream* (developed by engineer Alexander Mordvintsev), creating unique images using visual or text prompts.

THE EVOLUTION OF AI-GENERATED ART (2016-2022)

2016



The Next Rembrandt project, created by J. Walter Thompson Amsterdam and the Dutch bank ING, uses a deep learning algorithm to analyse the Dutch painter Rembrandt's techniques to generate a new portrait in his style, which is exhibited at the Rembrandt House Museum.

2018



Edmond de Belamy, created by Obvious, a Paris-based collective, sells for US\$432,500 in an auction at Christie's in New York – a record for AI art.

Artbreeder, a website using the models StyleGAN (introduced by Nvidia) and BigGAN launches to allow users to generate and modify images such as faces, landscapes, and paintings.

2019



Stephanie Dinkins wins the Creative Capital award for her creation of an evolving artificial intelligence based on the 'interests and culture(s) of people of colour'.

Sougwen Chung wins the Lumen Prize for her performances with a robotic arm that uses AI to attempt to draw in a manner like Chung.

2021



OpenAI releases a series of images created with the text-to-image AI model DALL-E.

EleutherAI releases the open source VQGAN-CLIP based on OpenAI's CLIP model.

2022



DALL-E 2, a successor to DALL-E.

Midjourney launches, which generates images from user prompts with a totally unique gothic style, particularly appealing to anyone interested in science fiction.

Release of Stable Diffusion, a text-to-image generator which can generate images from prompts or other images, edit photos, and make videos in a variety of styles including anime and photorealistic.

THE EVOLUTION OF AI-GENERATED ART (2023 TO DATE)

2023



Issues arise determining who owns the rights to an AI-generated artwork. The US Copyright Office states that AI-generated works cannot be copyrighted since they lack human authorship, which may result in the unauthorised use or distribution of their work.

Getty Images files a case against Stability AI, alleging that the company copied 12 million images to train its AI model 'without permission'.

Refik Anadol's opens the installation *Unsupervised* at The Museum of Modern Art, New York.

Refik Anadol launches *Winds of Yawanawa*, a collaborative project, consisting of a collection of 1,000 unique data paintings, which brings the nuances of Yawanawa art to the digital world with the aim of preserving the community's rich culture.

2024



Whitney Museum of American Art shows *Harold Cohen: Aaron*, tracing the evolution of the earliest AI artmaking program.

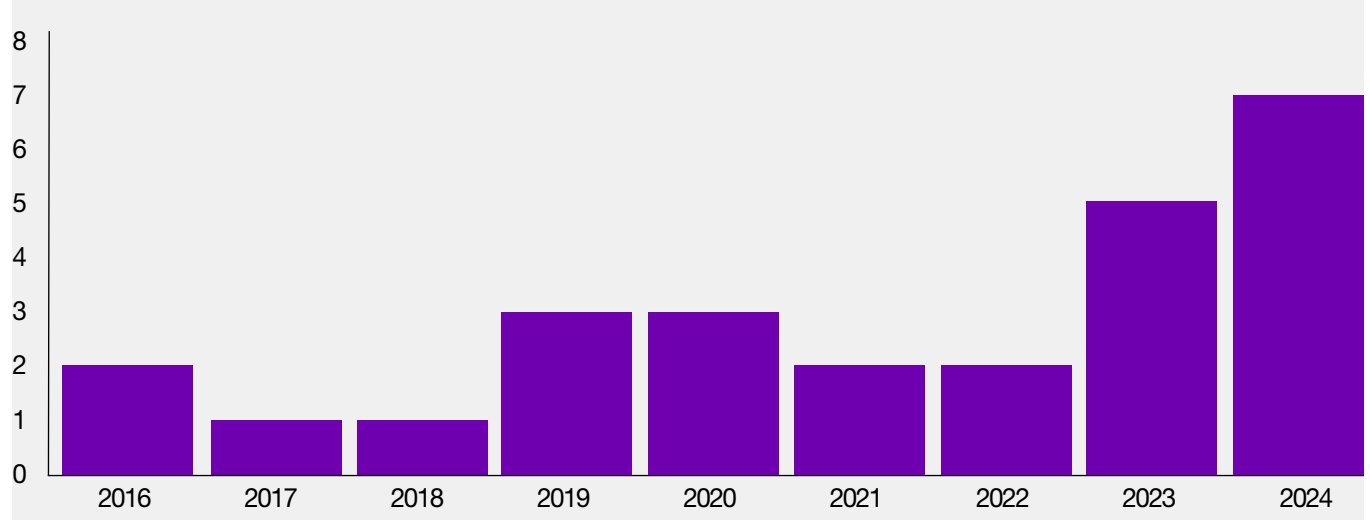
ART MARKET TRENDS: AI-GENERATED ART AND MUSEUMS

Increasing museum interest in AI-generated art

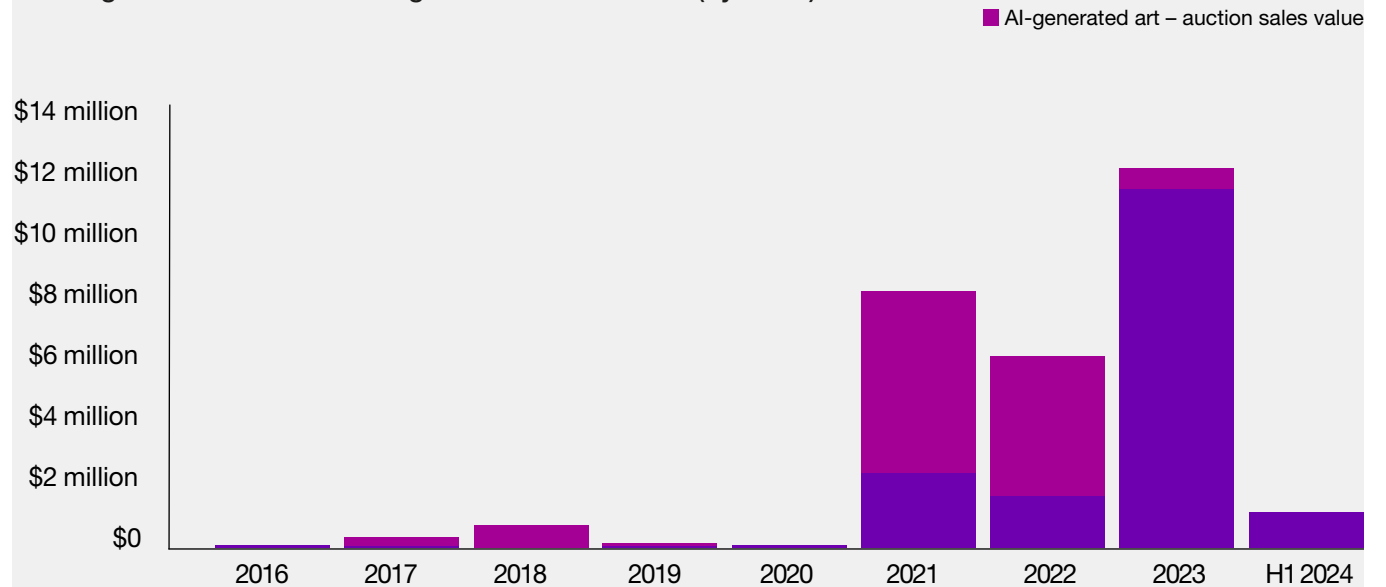
Museums are becoming more involved in AI-generated art, through exhibitions, acquisitions, and educational programmes looking at the intersection of technology and art.

In 2019, the Barbican Centre in London put on the *AI: More than Human* exhibition, exploring creative and scientific developments in AI. In 2024, exhibitions around the world of artists working with AI include Harold Cohen at the Whitney Museum of American Art in New York, Ian Cheng at the Foundation Beyeler in Basel, Vera Molnár at Centre Pompidou in Paris and Refik Anadol at London's Serpentine Gallery.

Museum exhibitions dedicated to AI-generated art



AI and generative art sold through traditional auctions (by value)



ART MARKET TRENDS: AN EVOLVING AUDIENCE

Will AI-generated art create a new, younger audience?

Seasoned collectors are sceptical of the potential of AI-generated art, with only 16% believing that it will ever fetch the same price as human-created art. But art enthusiasts are more optimistic, with more than half (56%) thinking that it will become as valuable as man-made art. These findings highlight a growing recognition of AI-generated art as an artistic medium, with more pieces being sold over the past three years through both the traditional auction market and NFT marketplaces, such as OpenSea.

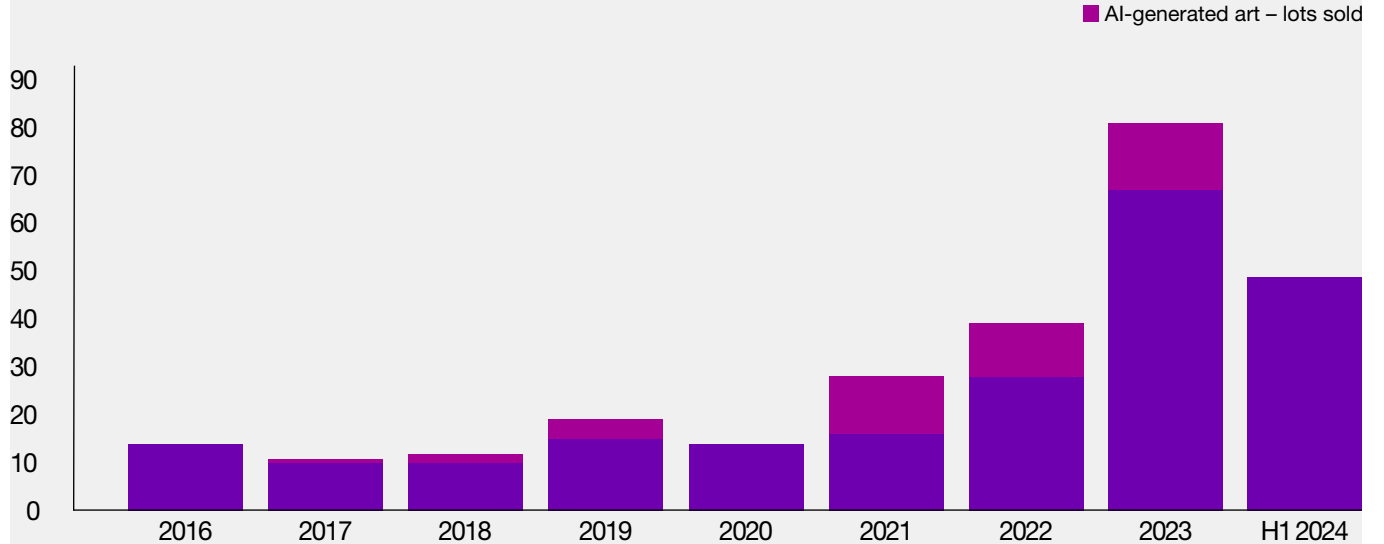
The boom in AI-generated art sales coincided with the NFT boom in 2021-22, but the interest has continued despite the collapse of the NFT market, and auction sales of AI and generative art reached a new peak in 2023. There are also signs that NFT collectors are looking for more sophistication, purpose and content. This is seen in the success of the Winds of Yawanawa, launched in July 2023, which saw media artist Refik Anadol collaborate with the Brazilian indigenous Yawanawa community. Proceeds from the sale of 1,000 unique data paintings will help safeguard the Yawanawa's culture, which has seen total sales of \$31.8 million by 1 August 2024.

Background

The sale of *Edmond de Belamy, from La Famille de Belamy* for \$432,500 at Christie's in London in 2018 marked a pivotal moment in the evolution of the AI-generated art market. Created by the Paris-based collective Obvious, this portrait was the highest priced AI-generated artwork to be sold at auction. This sale prompted Christie's to ask the question: "Is artificial intelligence set to become art's next medium?"

Since then, similar artworks by Obvious have experienced less interest, with a total of nine works coming to auction since 2019, of which four failed to sell. On 17 July 2024, Obvious returned to Christie's with another AI and MRI-generated artwork, Stagnant Elixir's Sweet (2024), which sold for \$35,280, above its estimate (\$7,000-\$10,000) but a far cry from the priced fetch for Edmond de Belamy.

AI and generative art sold through traditional auctions (lots sold)



AI AND GENERATIVE ART AUCTION SALES

Top ten – AI and generative art sold through the traditional auction market

Artist Name	Title	Medium	Auction price (US\$)	Auction house	Location	Date
Dmitri Cherniak (b.1988)	Ringers #879 (The Goose) (2021)	Generative art	6,215,100	Sotheby's	Online	Jun-23
Dmitri Cherniak (b.1988)	Self-portrait #1	Generative art	2,682,000	Sotheby's	Online	Oct-21
Refik Anadol (b.1985)	Machine Hallucinations – Space : Metaverse (2021)	AI-generated art	2,353,251	Sotheby's	Hong Kong	Oct-21
Refik Anadol (b.1985)	AI Data Painting	AI-generated art	1,700,000	Simon de Pury	Capri	Jul-22
Refik Anadol (b.1985)	Living Architecture: Casa Batlló (2022)	AI-generated art	1,380,000	Christie's	New York	May-22
Tyler Hobbs (1987)	Fidenza #725 (2021)	Generative art	1,016,000	Sotheby's	New York	May-23
Refik Anadol (b.1985)	Machine Hallucinations : Earth (Infinite AI Data Painting) (2021)	AI-generated art	877,091	Sotheby's	Hong Kong	Oct-21
Robbie Barrat (b.1999)	AI-Generated Nude Portrait #7 Frame #64 (2018)	AI-generated art	842,133	Sotheby's	London	Mar-22
Tyler Hobbs (1987)	Fidenza #479 (2021)	Generative art	622,300	Sotheby's	Online	Jun-23
Refik Anadol (b.1985)	Machine Hallucinations : Galaxy (Infinite AI Data Painting) (2021)	AI-generated art	517,779	Sotheby's	Hong Kong	Oct-21

Methodology: the data analysis is based on AI and generative art sold through traditional auctions only (i.e. Sotheby's, Christie's and Phillips). Art sold through NFT platforms such as Opensea is not included. The sample of artists in this analysis includes: Vera Molnar, Dmitri Cherniak, Tyler Hobbs, Erick Calderon (aka Snowfro), Matt DesLauriers, Refik Anadol, Robbie Barrat, Anna Ridler, Obvious, Claire Silver, TeamLab, Emily Xie, Mario Klingemann, Sofia Crespo, Casey Reas, Elman Mansimov, Sougwen Chung, Harold Cohen, Mathew Dryhurst and Holly Herndon, and Roope Rainisto.

HOW DOES AI MAKE YOU FEEL?

Art collectors show some wariness of AI

Art collectors feel less excited about the evolution of AI (33% are 'very excited' or 'somewhat excited' about it), compared to art enthusiasts (71% of whom said they are 'very excited' or 'somewhat excited'). Collectors are far more worried about the technology than art enthusiasts. Four-in-ten (41%) collectors are either 'somewhat' or 'very concerned', compared to only 16% of art enthusiasts.

Conversely, new art buyers are more excited

New collectors are more enthusiastic about AI than are worried by it. Most (54%) are either 'very excited' or 'somewhat excited', although 29% are 'somewhat concerned' or 'very concerned'.

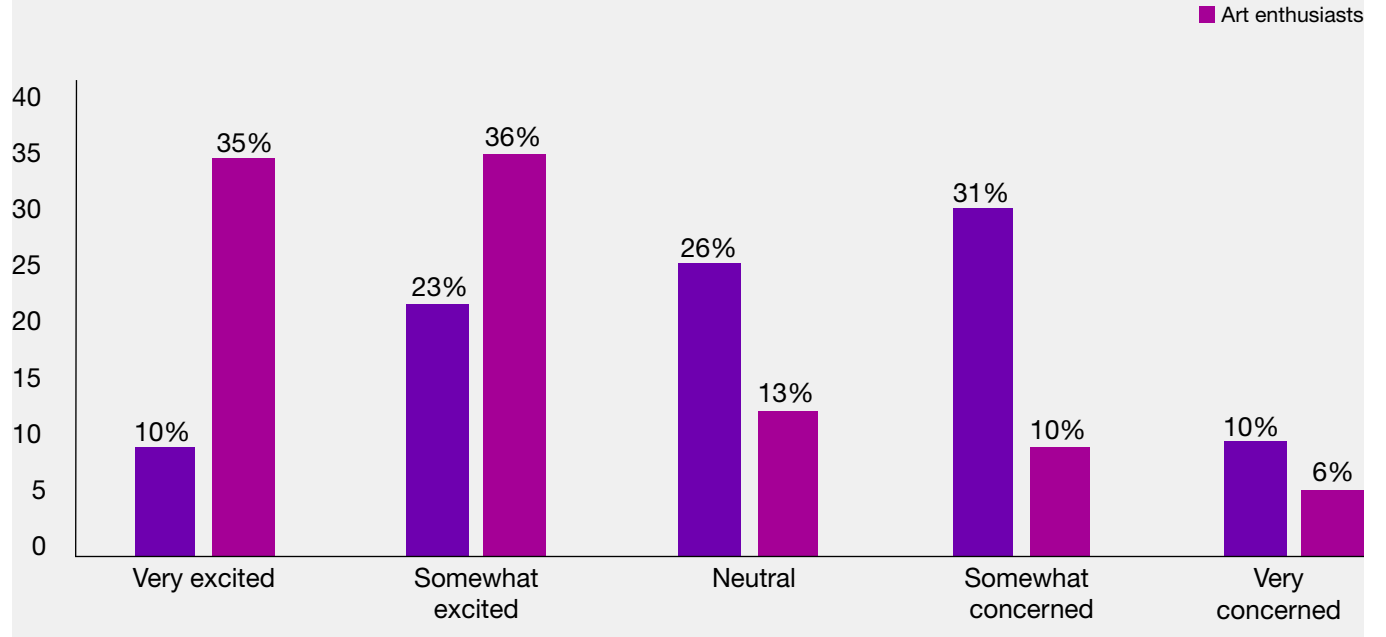
Generation gap

Higher volumes of younger collectors (44%) are excited (either 'very excited' or 'somewhat excited') about AI than older collectors aged over 55 (23%). They are also less concerned by its evolution than older buyers, with 37% saying they are 'somewhat concerned' or 'very concerned', compared to 49% of older collectors.

What is AI-generated art?

In this report we refer to AI-generated art as being artworks created (digitally or physically) using artificial intelligence algorithms. These algorithms, which will often use techniques like machine learning and neural networks, generate visual pieces either autonomously or in collaboration with human artists. AI art falls under the umbrella term of generative art, which is often defined as code-based art.

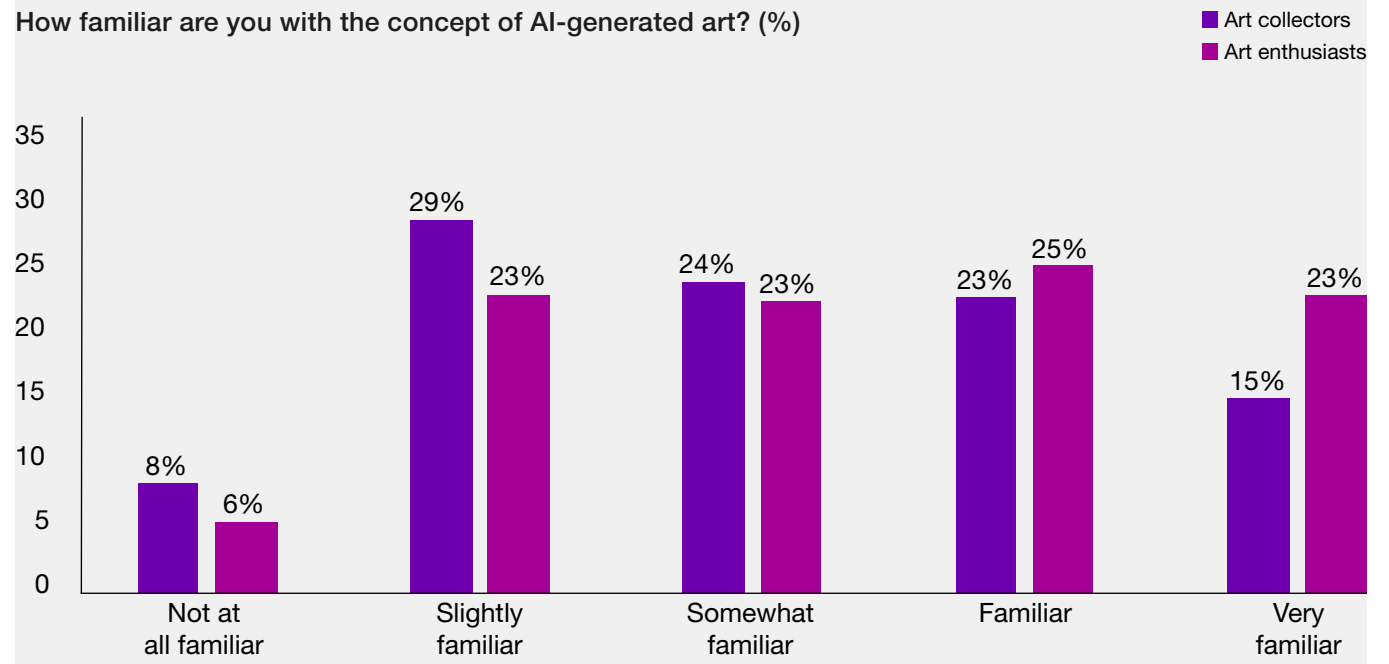
How does the rapid evolution of AI-technology make you feel in general? (%)



SURVEY ANALYSIS

Familiarity and awareness of AI-generated art

Both collectors (62%) and art enthusiasts (71%) are either 'familiar' or 'very familiar' with AI-generated art, but generational differences exist, with 41% of young art collectors knowing about it, compared to the 33% of older collectors.

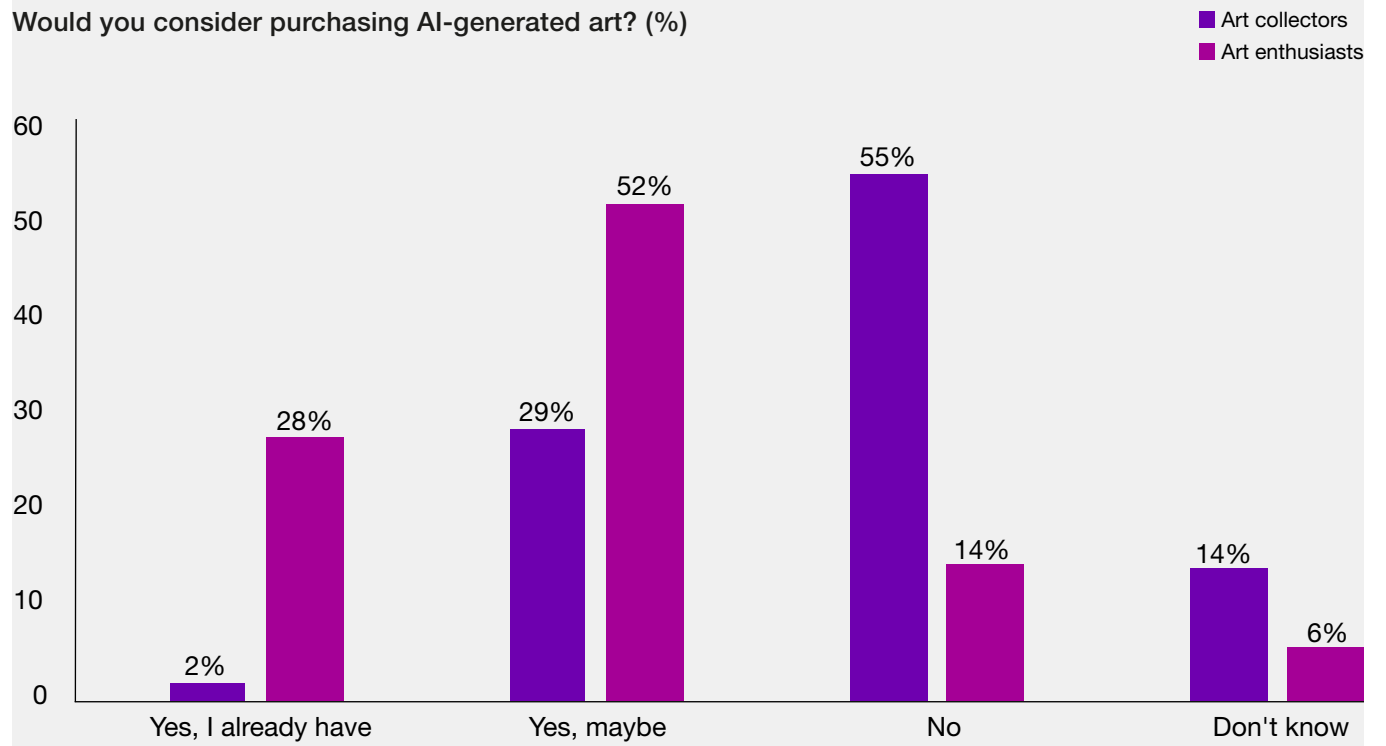


BUYING AI-GENERATED ART

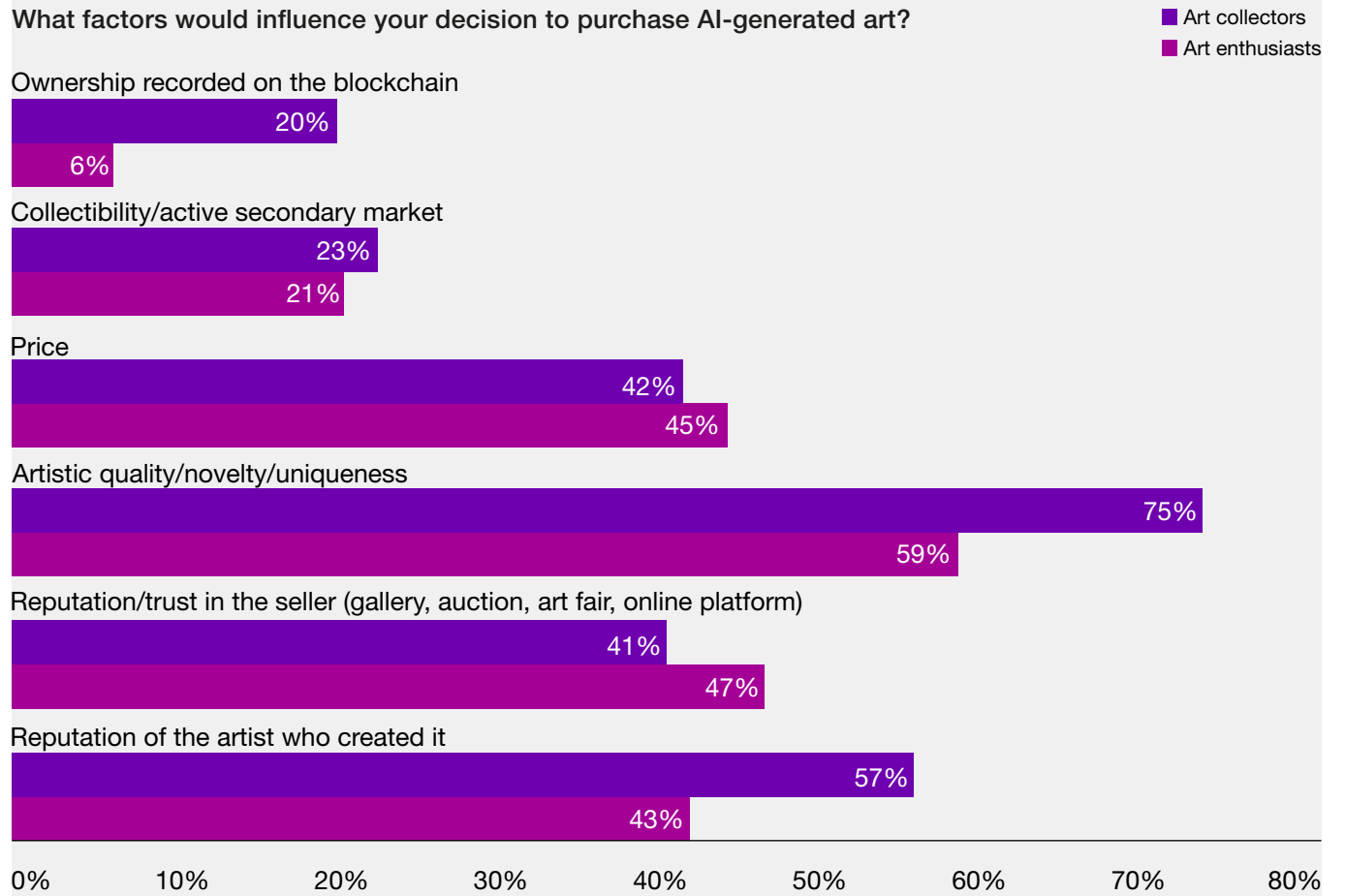
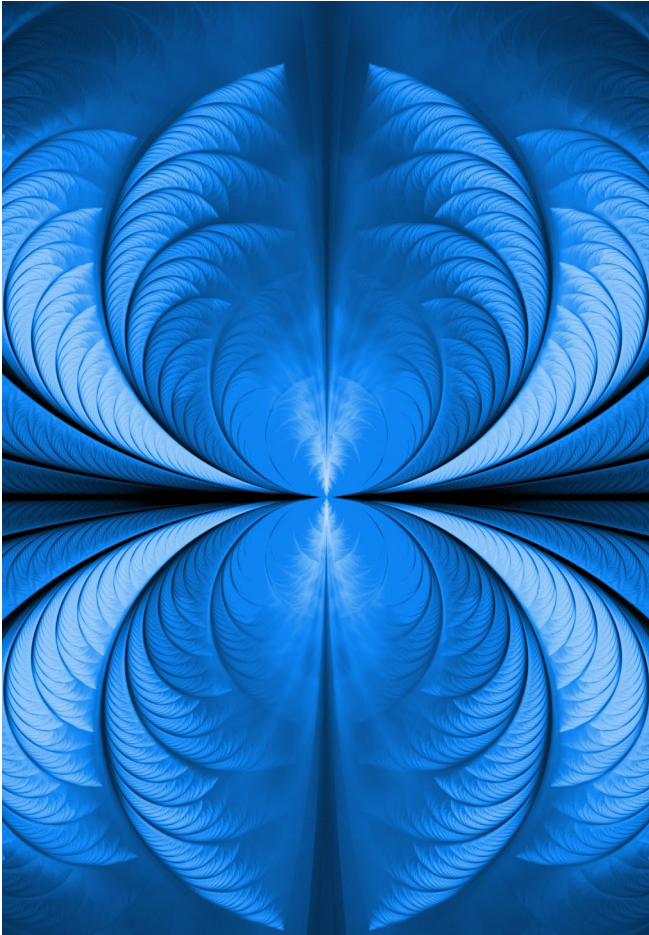
Potential demand

Art collectors are more reluctant to buy AI-generated art than art enthusiasts. Only 2% of art collectors have bought an AI-generated artwork, although 29% might consider buying one, while 7% of new collectors have bought a work, but a further 39% might in future.

At the other end of the scale then, over a quarter of art enthusiasts (28%) have already purchased AI-generated art, while more than half (52%) say they might do so. They are likely to have paid for a piece of art using one of a number of consumer technologies, such as Stable Diffusion, Midjourney, DALL·E, or through a website or artists selling AI-generated art online, or through an NFT.



WHAT WOULD ENCOURAGE PEOPLE TO BUY AI-GENERATED ART?



WHAT ARE THE KEY CHALLENGES AND CONCERNS?

Art collectors

75%

say quality is key.

57%

think the artist's reputation is important.

42%

will buy if they consider a work to be good value.

Art enthusiasts

59%

say quality.

47%

regard the seller's reputation to be the clincher.

45%

think price is paramount.

Lack of emotional connection

Most (60%) art collectors are concerned about the lack of emotional connection with AI-generated art, in that there is no human hand involved in its creation. This was a particular issue with younger buyers (70%) and new art buyers (71%), but not so much one for art enthusiasts (47%).

Authenticity and originality

The majority (61%) of art collectors surveyed say they worry about how genuine and unique AI-generated art is. Half of young collectors (50%) and most new collectors (57%) share this concern, as do art enthusiasts, most (52%) of whom regard this as being the main challenge to buying these artworks.

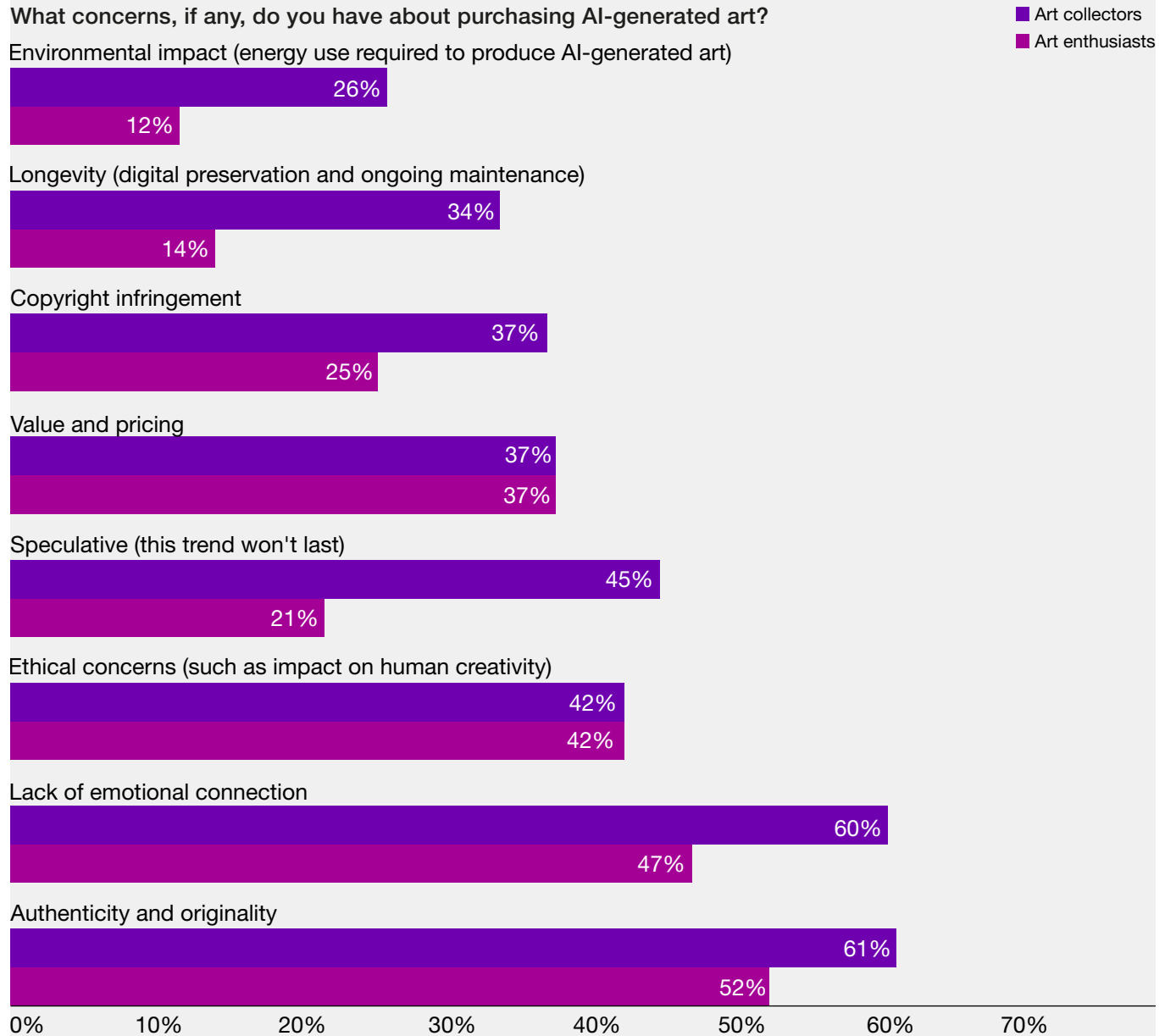
Speculation risk

Nearly half of art collectors (45%) worry about buying overpriced AI-generated art near the top of a market that may soon correct, like the bubble that developed during the NFT boom in 2021-22. This is much less of a concern for art enthusiasts (21%).

SURVEY ANALYSIS



ART AND AI REPORT 2024



SURVEY ANALYSIS

Ethical concerns

Art collectors and art enthusiasts (both 42%) have shared ethical concerns about AI's impact on human creativity. Perhaps surprisingly, this concern was strongest among younger collectors (47%).

Longevity and preservation

As AI is evolving fast, 34% of art collectors have concerns about how these artworks can be run and displayed in future. This a big worry for only 14% of art enthusiasts, which might reflect the difference between viewing AI-generated art as decoration or as a collectible, for which lifespan and value are very important.

Environmental impact

Over a quarter (26%) of collectors worry about the amount of energy needed to run the AI models that make this art, although this is a major concern for only 12% of art enthusiasts. This could be because there is limited awareness now among the public of how much power AI requires. Making a single image with generative AI uses as much energy as fully charging your smartphone, according to a 2023 article in the MIT Technology Review¹. As a result, the data centres which train and run the AI models use a lot of power and are set to use even more as the AI revolution takes hold. Their consumption of electricity could double between 2022 and 2026, to around roughly the same amount of energy used by Japan, says the International Energy Agency².

¹<https://www.technologyreview.com/2023/12/01/1084189/making-an-image-with-generative-ai-uses-as-much-energy-as-charging-your-phone/>

²<https://iea.blob.core.windows.net/assets/18f3ed24-4b26-4c83-a3d2-8a1be51c8cc8/Electricity2024-Analysisandforecastto2026.pdf>

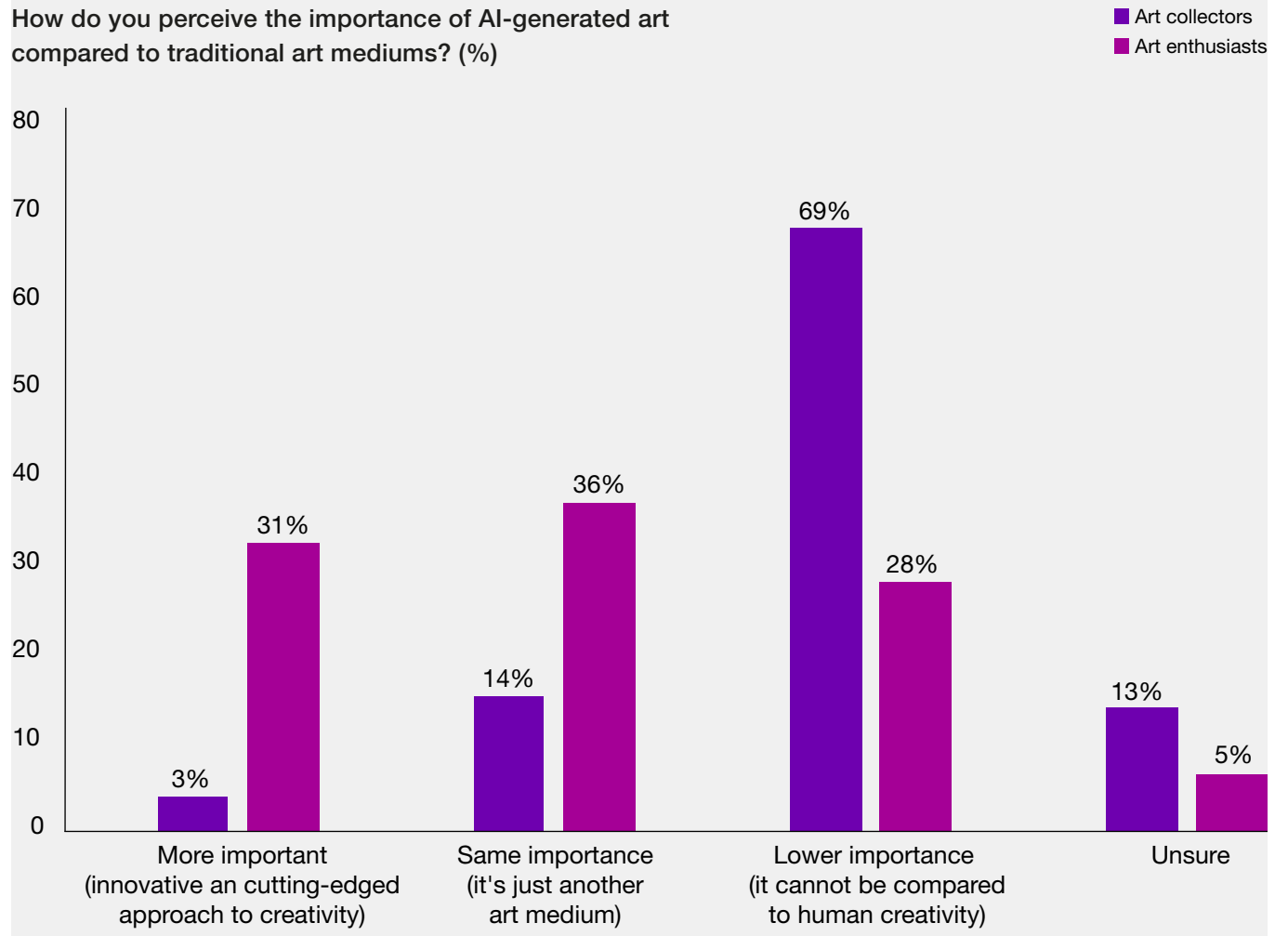
SURVEY ANALYSIS: PERCEPTIONS

The perception of AI-generated art compared to traditional art mediums

Most collectors view AI-generated art as inferior

Nearly seven out of ten (69%) art collectors believe AI-generated art is not as good as human-generated art. A similar proportion of young collectors (67%) share this view. But fewer than half of new collectors (44%) think the same, with over a quarter (26%) believing it to be just as important as painting, sculpture, photography and other traditional artistic forms.

Art enthusiasts are more optimistic. Over a third (36%) think AI-generated art is just as good as human art, while a further 31% think it's better, because it's at the cutting edge of creativity and innovation. This suggests there could be a growing market for AI-generated art among younger buyers and enthusiasts.



SURVEY ANALYSIS: VALUE AND LABELLING

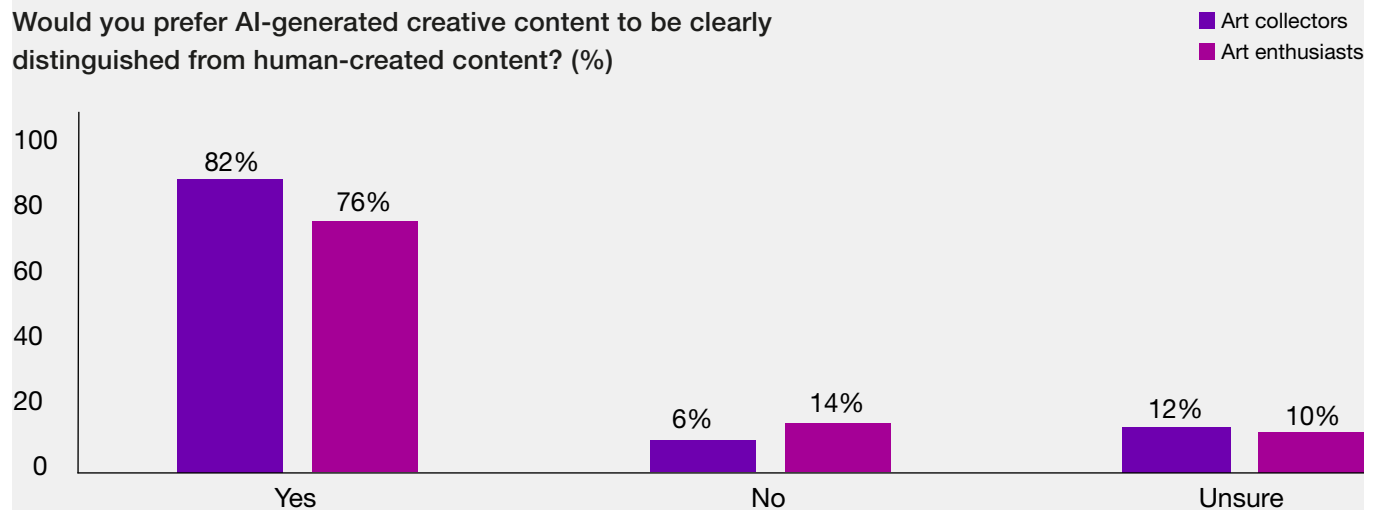
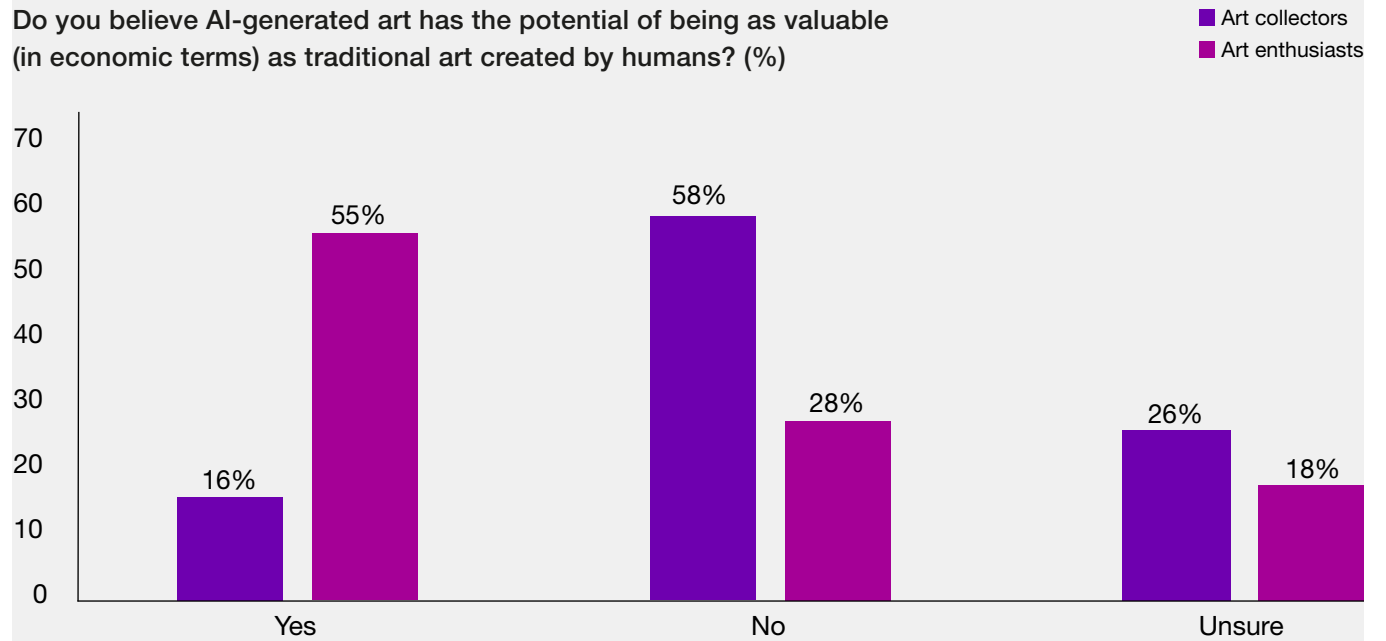
Collectors are sceptical about the AI-generated art market

Only 16% of art collectors believe AI-generated art has the potential of being as financially valuable as man-made art. While the findings show that high volumes of younger buyers (18%) believe the same, 26% of new art buyers think AI-generated art could fetch the same prices eventually. In contrast, over half (56%) of art enthusiasts think AI-generated art will sell for the same amounts as man-made pieces.

AI-generated content needs to be clearly labelled

There is a strong desire among both art collectors (82%) and art enthusiasts (76%) for clear distinguishing between AI-generated art and man-made content. It seems many people are worried that computer-created imagery could be passed off as being made by artists.

This echoes a broader concern that consumers could be interacting with AI content without their knowledge, or consent. Clearly labelling art as being made by AI boosts the credibility of both computer-generated and man-made art by not misleading users about its source and authorship, and could be important in establishing a future market for AI-generated art.



SURVEY ANALYSIS

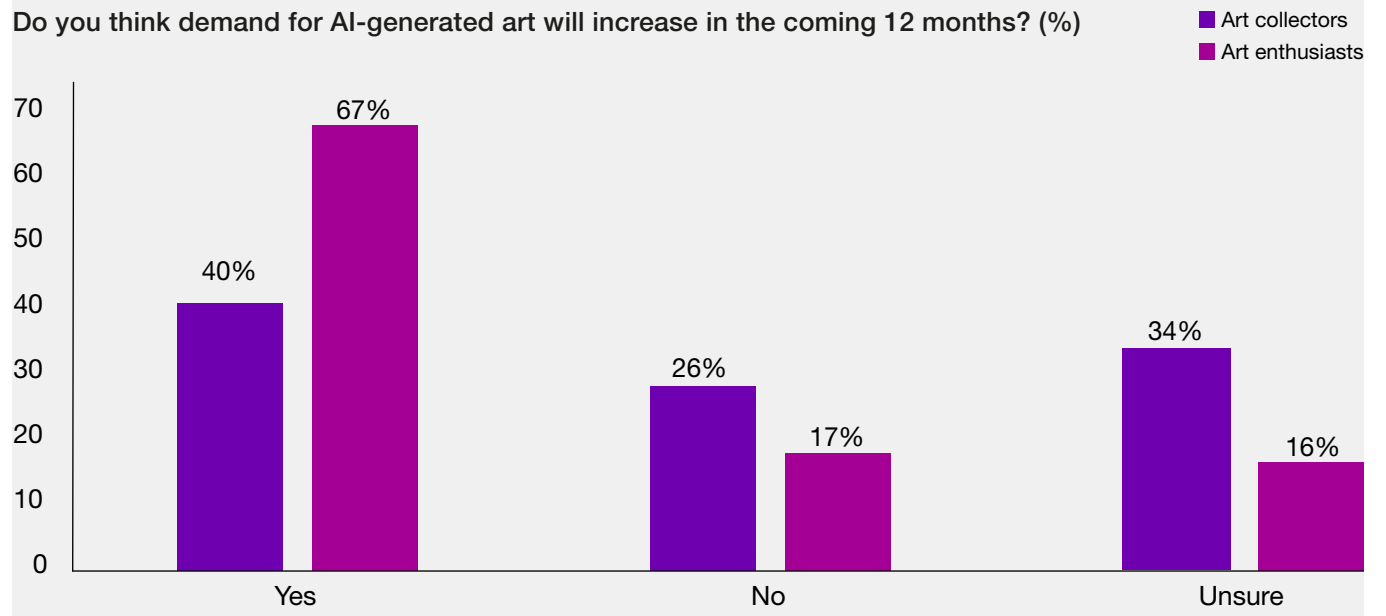
Demand is likely to increase in the next 12 months

Despite the hesitancy among art collectors towards AI-generated art, 40% recognised that more people are likely to buy these works in the next 12 months. Art enthusiasts are more positive, with more than two-thirds (67%) saying AI-generated art sales are likely to pick up.

Art enthusiasts' growing interest in AI-generated art suggests a promising future for it as a collectible. Their enthusiasm could also drive greater acceptance of it among the cognoscenti and the gradual integration of AI-generated art into the mainstream market. This shift might encourage more collectors to overcome their initial doubts about its value and potential, especially if AI-generated art gains greater exposure through exhibitions, leading to increasing critical acclaim and more high-profile auction sales.

Are AI and NFTs the next frontier for art collecting?

At present, AI-generated art is unlikely to take off in the traditional art market, because of collectors' scepticism. Instead, a new wave of creativity and innovation is sweeping across the NFT market, which incorporates AI into the fabric of NFT creation and functionality. This new generation of NFTs uses AI to continuously change and adapt, offering collectors an ever-evolving piece of digital art. There are NFTs that change and adapt to external stimuli, such as the time of day, weather patterns or current events, creating dynamic and interactive art content and experiences. The convergence of AI-generated art and NFTs is pushing the boundaries of creativity and ownership in the art and collectibles market. A new era of innovation and exploration in digital artistry is unfolding, as artists experiment further.



CONCLUSION

Conclusion

This report's findings highlight a promising yet challenging future for AI-generated art. A new generation of collectors and art enthusiasts are showing a growing interest in this innovative medium, while traditional collectors remain doubtful about its potential.

The more positive views of AI-generated art held by new art buyers and enthusiasts suggest the basis for a growing market in the future. The evolution of the NFT art market over the past three years suggests there is demand for AI-generated digital art, as the market in NFTs has developed alongside the traditional art market thanks to a new generation of collectors that often aren't interested in older art forms.

The primary concerns about AI-generated art which are, for now, holding back its growth centre on its relationship with human creativity: primarily, the extent to which it imitates or even replicates existing man-made artworks, whether those original artists have been fairly compensated for that and transparency in the use of AI.

It is essential that these worries are clearly and honestly addressed to establish integrity and trust in the nascent AI art market. A comprehensive framework, combining legal, technical, and educational measures, should be developed concerning the role of AI in creating art and it is clearly differentiated from man-made art. This will be how the art community can build a responsible, honest and fair market for AI-generated art in the future.

SURVEY SAMPLE METHODOLOGY: ART COLLECTORS

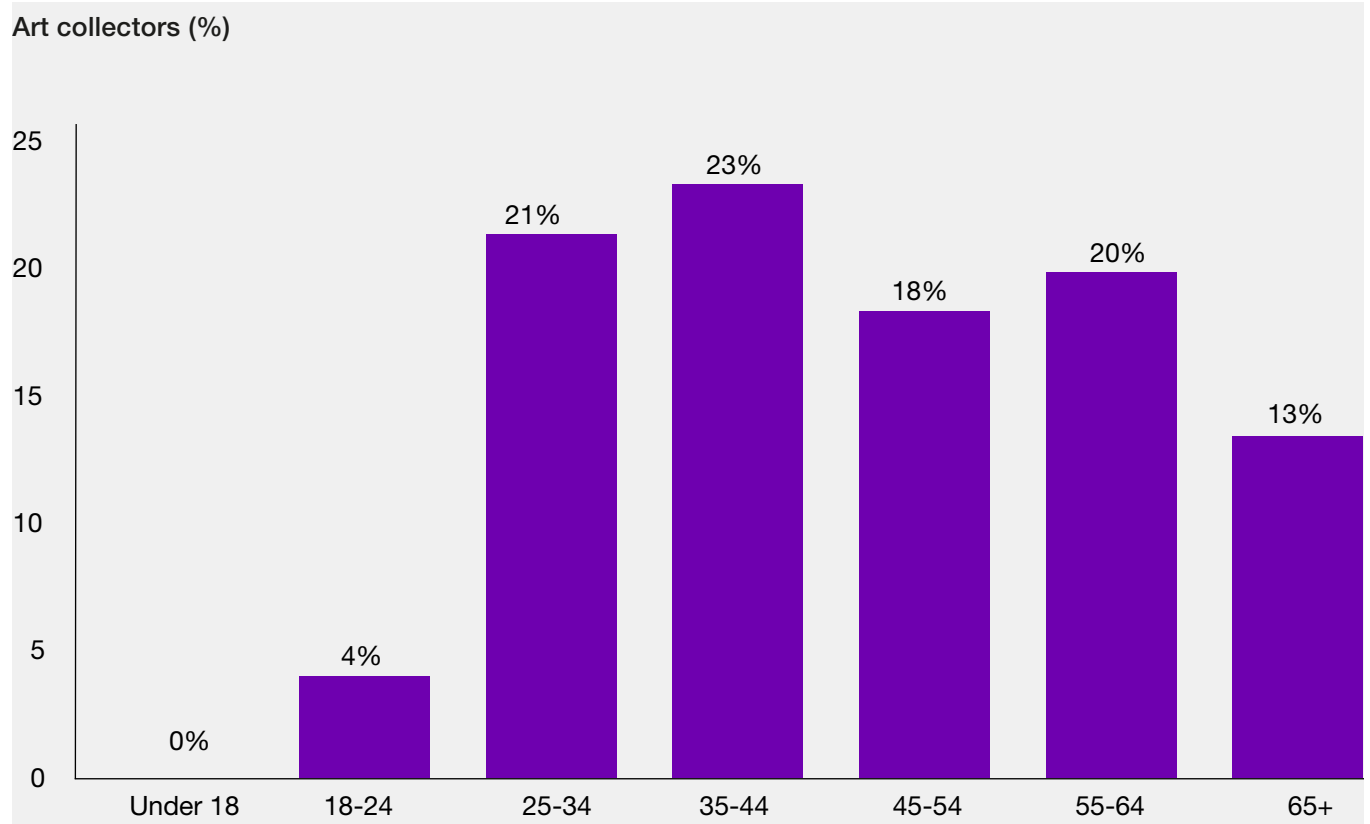
The surveys were carried out by ArtTactic between April and June 2024 and consisted of an art collectors survey and an art enthusiasts survey.

Art collectors

Sample size: 210

Source: ArtTactic art collector sample

- Individuals who actively seek out and purchase art primarily for investment or collecting purposes.
- Likely to have a deeper knowledge and understanding of the art market.
- More inclined to invest significant amounts of money in acquiring pieces that they believe will appreciate in value.
- Typically involved in various art-related activities such as attending galleries, auctions, and exhibitions regularly.
- This group may include both seasoned collectors with extensive collections and newer collectors who are steadily building their portfolios.



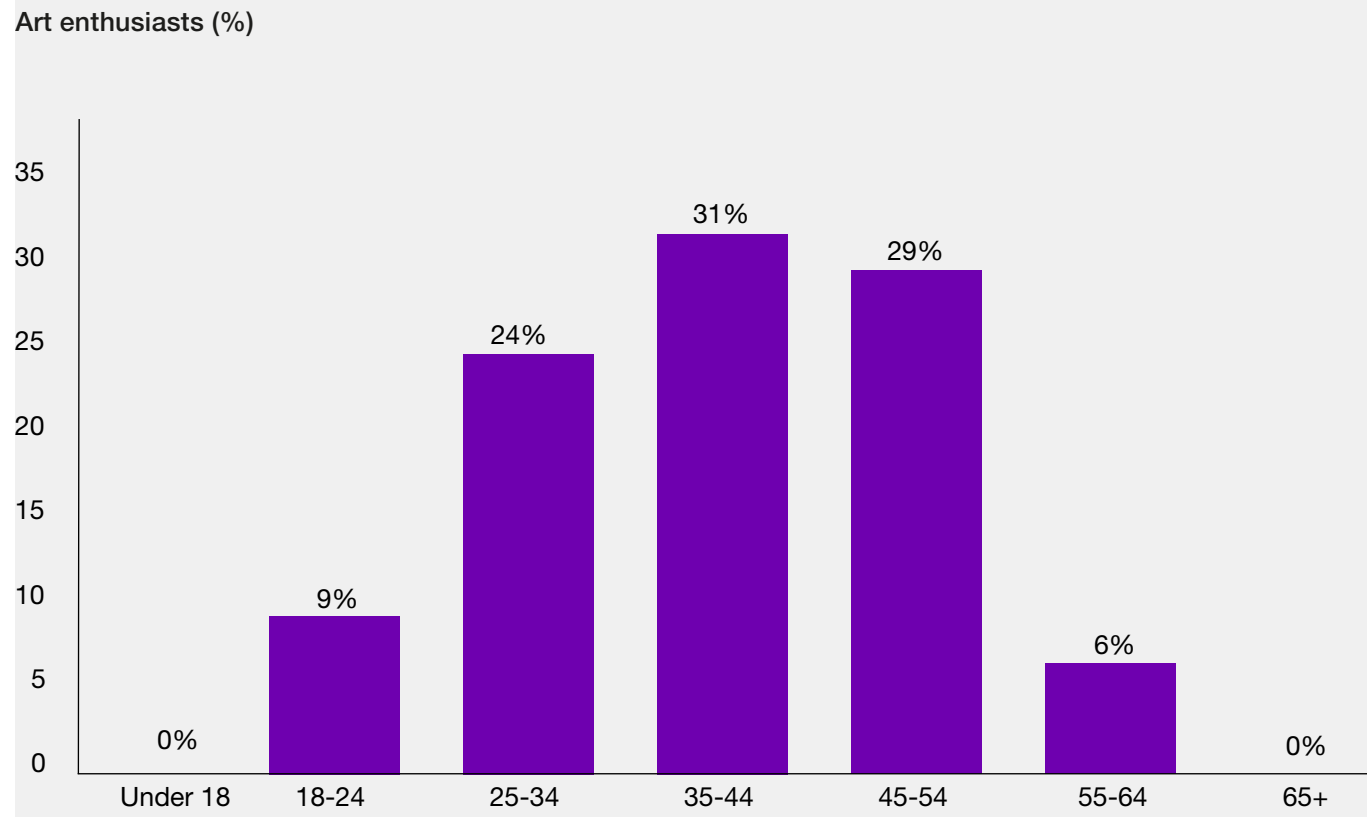
SURVEY SAMPLE METHODOLOGY: ART ENTHUSIASTS

Art enthusiasts

Sample size: 243

Source: Purchased sample from the USA and Europe, aged 18-65, household income of \$25,000-\$100,000+, who said they were interested in art and/or had bought some kind of artwork in their lifetime.

- Predominantly purchase art for decorative purposes rather than for investment or collecting purposes.
- May not have extensive knowledge of the art market but have a genuine interest in art and aesthetics.
- Purchases are often motivated by personal taste and the desire to enhance living or working spaces.
- Likely to engage in art-related activities occasionally, such as visiting galleries or art fairs, but not with the regularity or intensity of collectors.
- This group includes a wide range of individuals from those who occasionally buy prints or digital art to those who might buy original pieces for personal enjoyment.



AI GLOSSARY

Artificial intelligence (AI)

The science of making machines intelligent, so they can recognise patterns and get really good at helping people solve specific challenges or sets of challenges.

Artificial general intelligence (A.G.I.)

The evolutionary end point of A.I. popularised in science fiction, best described as a thinking (and perhaps even feeling) machine that can establish and pursue its own goals.

Collaborative AI

Collaborative AI involves AI systems designed to work in cooperation with humans, enhancing human capabilities and facilitating collaborative decision-making.

Deep learning

Deep learning is a subset of machine learning that utilises neural networks with multiple hidden layers to process complex data and solve intricate problems, such as image recognition and natural language processing.

Generative adversarial networks (GANs)

GANs are a class of generative AI models consisting of two neural networks, the generator and the discriminator, working in tandem to produce high-quality synthetic data.

Generative AI

Generative AI models take inputs such as text, image, audio, video, and code, and use it to generate new content in a variety of formats.

Large language models

Large language models, like the popular ChatGPT-3, contain billions of parameters and excel in processing and generating human-like language. They have proven remarkable in various natural language understanding and generation tasks.

Machine learning

Formally, machine learning is a subfield of artificial intelligence. It comprises techniques and methods to develop AI, by getting computer programs to do something without programming super-specific rules. It includes supervised, unsupervised, and reinforcement learning techniques.

Neural networks

Digital neural networks inspired by organic brains transmit information to recognise and generate data, and to automate decision-making.

Text-to-image

A machine learning model which takes an input natural language description and produces an image matching that description. An example of this is OpenAI's DALL-E.

Hiscox

22 Bishopsgate
London EC2N 4BQ
United Kingdom

T +44 (0)20 7448 6000
E enquiries@hiscox.com
www.hiscoxgroup.com

ArtTactic

Epworth House, 25 City Road
London EC1Y 1AA
United Kingdom

E info@arttactic.com
www.arttactic.com