
Editorial: Generative artificial intelligence in the creator economy

Introduction

The creator economy refers to the industry and its community creating, consuming and disseminating their contents on online platforms such as social media. Through these platforms, creators can monetise their contents and generate revenue through multiple sources such as sponsorships, advertisements, sales, subscriptions, etc. Currently, the creator economy, valued at around \$14bn per year (De Cremer *et al.*, 2023) and according to Goldman Sachs Research (2023), is expected to roughly double in size to \$480bn by 2027. In the creator economy, the most valuable commodity is the creator's audience, through which the creator monetises their contents. But building and maintaining an audience base is not straightforward. Creators tap into their creativity, talents and passions to produce engaging and original contents to attract and retain followers and turn their inspirations into new careers and businesses. However, this unique skill exclusive to humans is about to be altered in the face of technological change, by a type of technology that allows users to create new contents simply by "telling" it.

This type of technology, known as generative artificial intelligence (AI), belongs to a machine learning category that allows computers to generate new contents from music to art, to design and optimise business processes (McKinsey, 2023). A common technique of generative AI is using two neural networks, namely a generator and a discriminator, that competes with one another to produce and evaluate new contents. Aptly named generative adversarial networks (GANs), the generator creates new contents based on underlying data to "fool" the discriminator, which then evaluates the new contents to determine its similarity to the training data (i.e. the generator's reliability). In this manner, the two networks "compete" with one another resulting in an improved quality of the generated contents over time. Other generative models include transformer-based models, multimodal models and variational autoencoders (VAEs). Examples include MidJourney, Stable Diffusion and DALL-E, which generate contents. Another category of generative AI includes large language models (LLMs) such as generative pretrained transformer (GPT) and bidirectional encoder representations from transformers (BERT). These models use deep learning algorithms to process and understand natural language, capable of performing many language-related processing tasks, such as translation and answering questions. LLMs rely on natural language generation techniques to examine input data and use the patterns learnt from its training data to generate contextually plausible responses. ChatGPT, Google Bard and Bing Chat are examples of such applications.

Unlocking new possibilities

Can we envision the long-tail effects of generative AI? Which industry or sector stands to benefit most from this technology? Entertainment? Business opportunities? Learning opportunities? Creations? With many new generative AI-based tools coming out, the opportunities are diverse and many. Some newly emerged common use cases have also shown that these tools can produce credible and plausible writings, respond to criticisms, reason over structured or unstructured data, engage in conversations and diagnosis or to put

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it simply: produce creations that are fit to purpose. The theme is no longer “Can I use generative AI for task X”? but rather “With generative AI . . .”. While the scope of its impacts is unknown, it has lowered the entry barrier for creators and resulted in an altered pipeline of data creation and consumption.

Three main capabilities underpin the generative AI technology: (1) memory and pattern recognition with reasoning and causal interferences, (2) little to no coding skills required and (3) predictive capability based on training data. In an industry where creativity in contents creation plays a significant role, generative AI has opened new opportunities for ideation and creation of synthetic output, such as various types of convincingly authentic images and audio, helping creators to overcome creativity blocks and providing inspiration. To illustrate this, we include an example of generating images based on user prompts in Figure 1(a), (b) and (c). In our opinion, the visuals are remarkable, and the generative AI can respond and adjust to feedback. All it took was for the user to put in text a picture of what the user had in mind, and the results could be seen in a matter of seconds. While our art pieces may not fetch a decent price, we remain motivated that in 2019, an AI-generated painting, a portrait of “Edmond de Belamy” was sold for \$432,500 at Christie’s auction house (du Sautoy, 2019).

Generative AI will impact not only structured, repetitive, rule-based tasks; their work expanded to include low volume and variable assignment. They can help creators become more productive and efficient by automating time-consuming tasks to free up more time for higher-quality production. For example, they can accurately summarise documents in a concise time frame, automate video production and many more. Besides, they can help augment performance in creative work, possibly leading to greater efficiency and productivity. For example, Meta’s Make-A-Video text-to-video tool combines the motion of two images; with Synthesia, users can replace their voiceover with AI-generated voice from 65 languages and accents. Wordtune, on the other hand, uses AI to enhance articles, academic papers, essays, emails and other online content. Compose AI, which works on blogging platforms like Slack, Notion, essay, etc. uses AI to auto-complete text.

Generative AI-based tools can help creators develop skills and improve existing skills. In our trivial example (shown in Figure 1), we attempted to highlight a partnership between the

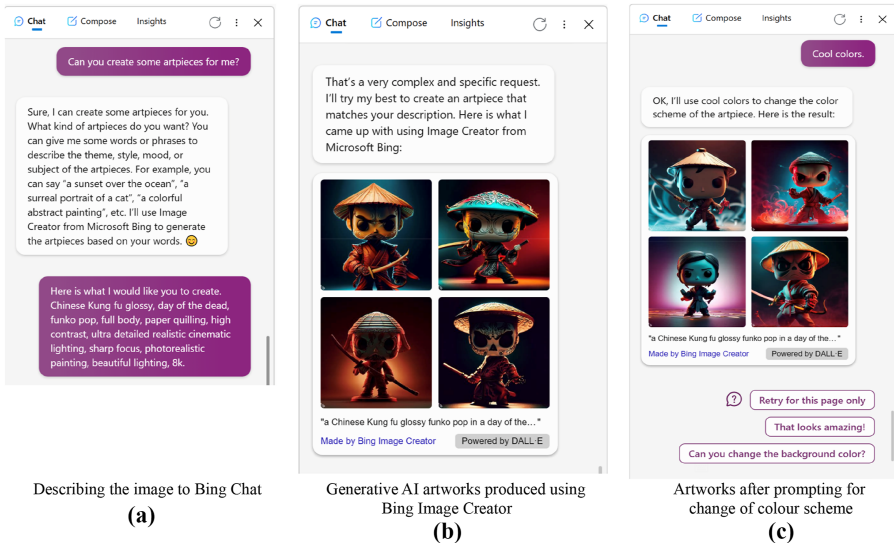


Figure 1.
Prompting Microsoft
Bing chat creative
mode to generate AI
images

Describing the image to Bing Chat
(a)

Generative AI artworks produced using
Bing Image Creator
(b)

Artworks after prompting for
change of colour scheme
(c)

creator and generative AI in which the tool can inspire and assist in creation. For decades, creative arts have been exclusive to the “talented” and those with the necessary skills and competencies. Generative AI is democratising and transforming the creative landscape. Not only is this more accessible to the general public, but a budding genre of artists and creators are emerging with accomplished expert-level skills, thanks to the help of generative AI in an AI-based curation economy.

But that is not all of it. According to the honing theory, creative thoughts in human proceeds by recursively drawing upon already formed inner associations to reflect one’s view or expectation onto the task until the task reflects one’s internal concept (view or personality) (DiPaola *et al.*, 2018). Driven by an intrinsic motivation to produce and influenced by an initial sketch, a creator can work with the generative AI to include personal styles and preferences by giving additional prompts. This creative process allows a creator to hone (and re-hone) a task until it is completed. According to Adobe’s Future of Creativity Survey (2022), creators believe that by using their creativity, they can drive awareness to advance social causes (51%), and give a voice to those who otherwise would not have one (49%). Most creators also revealed spending time in contents creation and sharing through the creative outlet of social media, and they are happier and have positive effects on their mental health as opposed to studies who have reported negative experiences from social media use. This is in line with the findings from Yamaguchi (2023) whose work reported that people with extreme views tend to post on social media more, and Chou *et al.* (2023) where motivations and perceived behavioural control drive people’s intention to live stream.

Concerns, or are they?

As more applications powered by generative AI become available, there are perhaps as many issues worth considering as opportunities worth exploring. As stated earlier, many tasks can be completed by generative AI applications, given the number of tools created thus far. Generative AI’s impacts will mainly be around content creation speed, driving growth, catalysing for more creativity, etc. Perhaps the most pressing question would be whether AI will overtake humans. But before we address this, we wish to bring forth several questions on various factors that we consider could lead to the ultimate question of whether AI will take over humans (or jobs).

The first aspect is contents. The availability of many generative AI tools that simplify work and could generate indistinguishable human-quality work means that there will be a proliferation of AI-produced work in the economy. At the time of this writing, AI generated work is still prone to hallucinations, although there are works where LLMs are taught to alternate reasoning with calls to external tools to boost accuracy (Piktus, 2023). This single factor would mean that humans are still not fully replaceable, although solely human-produced work will probably be occasional. Instead, it will surely augment repetitive tasks through automation. But this is not a new phenomenon. There are perhaps as many machine-made garments in addition as there are man-made garments in the market. Telemarketers, phone operators and receptionists have mostly been replaced by automatic “For English, press 1.” alternatives. Assembly-line and factory work too, have seen changes in how work is done. But it may take a while for autonomous driving cars to take over buses, taxis and trucks in our limited opinion. Man-made work has always, and we believe optimistically will command a premium price.

Related to the above is the issue of authenticity, specifically human touch and intellectual property. The human touch of a creator’s creation is the branding; regardless of whether it is niche audiences or general appeal, hence it will remain a challenge to preserve this authenticity in generative AI-produced work. Creators are people with a story to tell, which is the style that the AI would have to learn and perfect. Although there are a lot of advances where AI’s reasoning abilities are concerned, human creativity is a unique blend of emotions,

intuitions, experiences and spontaneity that is, in our opinion, not easily replicated. We want to state that the beauty of the human touch is that it can change like the weather, with lots of past experiences, tendency to take risks and explore new previously uncharted styles and designs. On the opposite, generative AI creations could risk infringement of copyrighted materials. The Museum of Modern Art in New York hosted an AI-generated installation based on its own collection while at the Mauritshuis, an AI variant of Johannes Vermeer's *Girl with a Pearl Earring* was showcased. Except that, the original was away on loan (Appel *et al.*, 2023). These platforms are trained on billions of parameters constructed based on huge archives of images and text. This process itself is ridden with risks and potential copyright infringements. There is still a lot of uncertainty on the use of generative AI. The fact that training data might include unlicensed work or whether AI can generate unauthorised works not covered by fair use could have far-reaching implications.

The current lack of legislative and regulatory frameworks means it is exceedingly difficult to deal with, let alone guard against issues concerning privacy, security, accountability and irresponsible use of AI-generated contents. In our view, this is related to the long-standing issue of transparency and explainability associated with AI, and generative AI's hallucination-prone chain of thoughts in reasoning. While the landscape is still unfolding, Reuters (2023) reported that governments worldwide are racing to regulate AI amid the rapid advances of the technology that are "complicating governments' efforts" to agree to laws that govern its use.

Research agenda

In this article, we have briefly discussed generative AI in the context of the creator economy. The opportunities and concerns were discussed, but much more must be explored as the field is still emerging. This article does not include technical discussions on the technology behind generative AI but adopts a social and personal lens to the technology. This is because the creator economy is very much an individual, yet community-based phenomenon. Creativity, the dream to turn creative passions into financial security, is not new to this century. Neither is the age of Internet nor social media. But the path is now beautifully crafted with the arrival of accessible digital channels and generative AI. To this end, we would like to suggest several areas for probable research agenda in the advent of the creator economy.

We call for studies on the trends leading up to the creator economy. How has the landscape of ownership, community and growth changed? In an interesting conundrum, on the one hand, people now have access to many very powerful and accessible generative AI tools and since the advent of the pandemic, people are shifting to online presence for various reasons including financial security. On the other hand, the "Great Resignation" phenomenon have been widely reported, and many technology companies have also reported huge layoffs. What is in store for the economy?

In addition, studies on understanding creators and how the use of generative AI technologies changes the way work is done are needed to understand the role of human agency and the intention. Embracing the potential by collaborating with generative AI redefines the boundaries of expression through artefacts and raises more questions on the very nature of work output and creator. For example, when a certain output generated by AI is of superior quality, who is the one who gets the credit? Likewise, who is responsible for harmful work? If a synthetic piece of work is misused, who should ultimately be responsible?

The rise of generative AI also brought along implications for retail, marketing and sales. How the adoption of these technologies could boost creators' retail and marketing efforts given that AI-created contents would likely become more prevalent? In addition, what concerns should creators consider, especially regarding their intellectual property portfolios? What issues surrounding copyright, mimicry and any other forms of derivative works exist for creators when using generative AI? How can businesses incorporate the use of generative

AI based works when transacting in the creator's economy? What kind of disclosures will be needed to ensure both parties are protected and guarded?

Draude *et al.* (2020), called for debates around accountability, transparency and fairness of algorithms to be undertaken within contexts of groups most affected by such systems. Likewise, we call for more insights on how this inevitable paradigm shift would impact humanity. How can society, by and large, prepare for generative AI? What are the psychological impacts of the technology? How can creativity and innovations be sustained in the advent of generative AI? How can lives continue to be enriched with the rise of generative AI along with other technologies like the metaverse and augmented reality technologies? Moving forward, generative AI has altered the creator economy, and at the rate at which this technology is developing, the terrains are as challenging to navigate as they are interesting. The rights of those who have created and enabled the creation must be respected, but at the same time, creators, consumers and enablers of creations are in an interesting mesh.

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References

- Adobe (2022), "Adobe "future of creativity" study", *Adobe*, available at: https://s23.q4cdn.com/979560357/files/082522_AdobeFutureOfCreativity.pdf (accessed 2 May).
- Appel, G., Neelbauer, J. and Schweidel, D.A. (2023), "Generative AI has an intellectual property problem", *Harvard Business Review*, available at: <https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem> (accessed 28 April).
- Chou, S.-W., Hsieh, M.-C. and Pan, H.-C. (2023), "Understanding viewers' information-sharing in live-streaming based on a motivation perspective", *Online Information Review*, Vol. 47 No. 1, pp. 177-196, doi: [10.1108/OIR-12-2020-0576](https://doi.org/10.1108/OIR-12-2020-0576).
- De Cremer, D., Bianzino, N.M. and Falk, B. (2023), "How generative AI could disrupt creative work", *Harvard Business Review*, available at: <https://hbr.org/2023/04/how-generative-ai-could-disrupt-creative-work> (accessed 29 April).

- DiPaola, S., Gabora, L. and McCaig, G. (2018), "Informing artificial intelligence generative techniques using cognitive theories of human creativity", *Procedia Computer Science*, Vol. 145, pp. 158-168, doi: [10.1016/j.procs.2018.11.024](https://doi.org/10.1016/j.procs.2018.11.024).
- Draude, C., Klumbyte, G., Lücking, P. and Treusch, P. (2020), "Situated algorithms: a sociotechnical systemic approach to bias", *Online Information Review*, Vol. 44 No. 2, pp. 325-342, doi: [10.1108/OIR-10-2018-0332](https://doi.org/10.1108/OIR-10-2018-0332).
- du Sautoy, M. (2019), "Can AI ever be truly creative?", *New Scientist*, Vol. 242 No. 3229, pp. 38-41, doi: [10.1016/S0262-4079\(19\)30840-1](https://doi.org/10.1016/S0262-4079(19)30840-1).
- McKinsey (2023), "What is Generative AI?", *McKinsey & Company*, available at: <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai> (accessed 19 April).
- Piktus, A. (2023), "Online tools help large language models to solve problems through reasoning", *Nature*, Vol. 618 No. 7965, pp. 465-466, doi: [10.1038/d41586-023-01411-4](https://doi.org/10.1038/d41586-023-01411-4).
- Reuters (2023), "Factbox: governments race to regulate AI tools", *Reuters*, available at: <https://www.reuters.com/technology/governments-efforts-regulate-ai-tools-2023-04-12/> (accessed 3 May).
- Sachs, G. (2023), *The Creator Economy Could Approach Half-A-Trillion Dollars by 2027*, Goldman Sachs, available at: <https://www.goldmansachs.com/intelligence/pages/the-creator-economy-could-approach-half-a-trillion-dollars-by-2027.html> (accessed 30 April).
- Yamaguchi, S. (2023), "Why are there so many extreme opinions online?: an empirical, comparative analysis of Japan, Korea and the USA", *Online Information Review*, Vol. 47 No. 1, pp. 1-19, doi: [10.1108/OIR-07-2020-0310](https://doi.org/10.1108/OIR-07-2020-0310).

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