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**UAE** Centre for the Fourth Industrial Revolution

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# Artificial Intelligence in Creative Industries: Guidelines for the Development, Regulation, and Use

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## **Executive Summary**

Focusing on transparency, inclusivity, and people-centrism, the report encourages a balanced approach that ensures that the benefits of AI are equitably distributed and that the creative industries continue to thrive in the age of AI-driven transformation.

The rapid advancement of Artificial Intelligence (AI) is fundamentally reshaping creative industries, challenging long-established frameworks specifically designed for content produced by human creators. Al's ability to generate music, art, literature, and other forms of creative work raises new questions about the boundaries of creativity and intellectual property (IP). This shift necessitates a re-evaluation of how we protect human agency and ensure that creative processes continue to reflect individual expression, while also recognising the transformative potential AI brings to these sectors. AI offers unprecedented opportunities for innovation, but without careful regulation it could erode the value and recognition of human contribution.

This report provides qualitative guidelines for navigating these complexities and covers the ethical, legal, and socio-economic challenges that must be carefully addressed. The guidelines in this report are framed around three core pillars: Transparency, Inclusivity, and People-centrism.

Transparency is paramount in ensuring the ethical use of AI in creative processes. The report underscores the need for clarity around AI's role in content creation, with special attention given to how AI systems are trained, the datasets they use, and how these inputs impact the creative outcomes. Transparency is essential for building trust among creators of content, developers, and consumers of AI-generated content. By making the development and deployment of AI in creative industries more transparent, stakeholders can minimise issues related to copyright infringement, biased outputs, and the devaluation of human contribution.

Inclusivity is a critical component in shaping an Al-powered creative future that reflects a wide range of voices and perspectives. The report highlights that without intentional efforts, Al could reinforce and potentially amplify existing inequalities by marginalising underrepresented creators and perpetuating dominant cultural narratives. The democratisation of AI tools and technology is therefore essential to ensuring that diverse creators, including those from underserved or marginalised communities, have the opportunity to participate in and benefit from AI. By prioritising inclusivity, AI stakeholders can help foster a more equitable creative ecosystem where global cultural diversity is celebrated and preserved.

People-centred innovation lies at the heart of AI's transformative potential in the creative industries. Al offers new tools for experimentation, automation, and personalisation, which can push the boundaries of human creativity. However, for this innovation to thrive, it is crucial that a robust regulatory framework is established to balance creativity and IP rights. The report emphasises the need for regulatory measures that protect human creators while encouraging the responsible use of AI technologies. By safeguarding creators' IP, while allowing AI-driven innovation to flourish, the creative industries can harness AI's capabilities to drive sustainable growth and creativity.

The guidelines aim to support stakeholders in the creative industries - including developers, professionals, policymakers and regulators, and the worldwide network of Centres for Fourth Industrial Revolution (C4IRs) - to responsibly integrate AI into creative processes and to test novel approaches while doing it. These guidelines promote a vision where AI could complement, rather than replace, human creativity. Focusing on transparency, inclusivity, and human-centrism, the report encourages a balanced approach that ensures that the benefits of AI are equitably distributed and that the creative industries continue to thrive in the age of Al-driven transformation. This balanced framework will empower creators and innovators to leverage AI in ways that protect the integrity of human creativity while expanding the horizons of what is creatively possible.

# From Algorithms to Art

### How Al joined the Creative Industries.

The history of AI in the creative field is a fascinating journey, evolving significantly over the decades, from early experiments to today's sophisticated applications. The relationship between AI and creativity can be traced back to the 1950s, when pioneers like Alan Turing began exploring the potential of machines that mimic human thought processes. In 1950, Turing published a paper that introduced the idea of machines performing tasks that would require intelligence if done by humans, laying out the fundamental motivator for the theory and development of AI, which became known as the Turing Test.<sup>1</sup>

In the 1960s, early AI programs like ELIZA (a chatbot created by Joseph Weizenbaum) and AARON (a drawing program developed by Harold Cohen) began to explore creative outputs. In some way, AARON is one of the earlier AI programs that was designed to produce original artwork autonomously.<sup>2</sup>



Image: Unsplash

#### Turing Test:

The Turing Test, introduced by mathematician and computer scientist Alan Turing in 1950, is a test of a machine's ability to exhibit intelligent behaviour equivalent to, or indistinguishable from, that of a human. In his paper "Computing Machinery and Intelligence", Turing proposed a test where a human evaluator interacts with both a human and a machine through text-based communication. If the evaluator cannot reliably distinguish machine from human, the machine is said to have passed the Turing test. The test has become a foundational concept in the study of AI. Modern AI systems have come close to passing variations of the test, yet the broader goal of achieving human-level intelligence is still a topic of ongoing research and exploration.<sup>3</sup>



## The Distinctive Impact of AI on Creative Industries

Creative industries are distinctive because the outputs of creative labour belong to public discourse in highly visible ways.

Amidst the potential for AI, defined as systems that produce content based on training data, to catalyse widespread social transformation, a strategic opportunity to focus specifically on the creative industries, as distinct from general office work or industrial labour, emerges. The creative industries – stated by the European Union (EU) to include "architecture, archives, libraries and museums, artistic crafts, audiovisual (including film, television, video games, and multimedia), tangible and intangible cultural heritage, design (including fashion design), festivals, music, literature, performing arts (including theatre and dance), books and publishing, radio, and visual arts" 4 - present unique opportunities and challenges for artificial intelligence.

Creative industries are distinctive because the outputs of creative labour belong to public discourse in highly visible ways. For example, films are awarded for excellence on a global stage – bridging high culture and popular entertainment – and video games are growing in socio-cultural significance.

In addition, the difficulty of being certain of whether creative output has been produced by artificial intelligence or by capturing a lived reality challenges perceptions and undermines trust. Frequent software updates to consumer-facing artificial intelligence tools such as Midjourney, Dall-E, and Sora showcase leaps in realistic graphics created from text prompts with a level of sophistication whereby even experts could not easily tell if they were created by Al. How should these artefacts be understood? What is artistic licence and what is misinformation? What priority or value should be assigned to human creators versus algorithmic processes?

#### Can Machines Be Inspired?

In the op-ed published by Faisal Kazim, Head of UAE Centre for the Fourth Industrial Revolution, he draws a thought-provoking parallel between Al training and human inspiration. He suggests that just as humans are inspired by the world around them without having to compensate every source of that inspiration, Al models experience and learn from vast amounts of data to generate new content. "It feels unfair to charge money to an entity, whether organic or silicon-based, to experience the beautiful world around us," Kazim writes.<sup>5</sup>

Media produced by artificial intelligence is a tangible form of cultural production, and therefore is a critical testbed for exploring artificial intelligence. Certainly, there are risks, from not only widespread misinformation and access to production but also hallucinations, that is, outputs from artificial intelligence that appear plausible but are inaccurate. Although hallucinations may not pose the risks to health that they do in fields such as medicine, the creative industries shape a shared human experience, and hallucinations are still harmful. It is precisely because of the value of creative expression that thoughtful consideration is necessary. Creative production has a transformative potential to unite people around a shared vision for humanity, and as such is worth supporting, including by exploring potential benefits of artificial intelligence.

### Benefits of artificial intelligence for creative industries include:

- Automating repetitive tasks: Some aspects of the creative process are time-consuming routine tasks, which, if automated, could free up time for deeper, more creative work, as well as reducing production costs.
- Extending and completing details: When a creator has a piece of work that needs editing, such as a photograph that is too cropped, artificial intelligence tools can quickly enhance or remove details, for example to expand the background.
- Rapid experimentation: Artificial intelligence tools can quickly produce copious options, making it possible to prototype more ideas in less time, to reduce errors, and to uncover unexpected juxtapositions and combinations.
- Customisation/optimisation: Building on a decade-long trend of personalisation, artificial intelligence makes it possible to produce multiple variations of a creative work, so that, for example, the protagonist in a story could change according to viewer preference.

- More, different contributors: Increasingly widespread consumer-facing tools make it possible for a broader group of people without formal training to produce visual and other types of content that might previously have only been produced by professionals.
- Unexpected outputs: Unique combinations of human creators, artificial intelligence tools, and appropriate data sets can catalyse new works that push frontiers beyond existing constraints.
- Simulated feedback: Creators can integrate workflow of generative outputs and Large Language Models (LLMs) to simulate and predict potential feedback and critical observation of their work; a form of expedited and simulated product-market-fit analysis or consumer/critic review.

In this context of optimism and experimentation, the UAE C4IR launched an exploration into the impact of AI on creative industries.

Through a series of one-on-one interviews and creative workshops in the spring and early summer of 2024 (see Methodology on p.20), the Centre endeavoured to better understand how creative professionals are thinking about artificial intelligence in their work and in their practice. A mix of both optimism and scepticism surfaced – but there are nuances to both.



Image: Pexels



### Current State of Al in Creative Industries

This section zooms in on the state of AI in creative industries: perceived concerns, pressures on processes and outcomes, and potential possibilities.

### A Period of Concern and Uncertainty

Despite widespread experimentation and in some cases full adoption of artificial intelligence among creative professionals, we found that this embrace was not devoid of material hesitation.



Alongside enthusiasm for the potential of artificial intelligence, there are serious concerns about potential harms, including:

- Unfair labour and compensation practices: Creative industry leaders underscore concerns about creator compensation and use of IP. Concerns include not only implications for creators, but also the harms of low-paid content moderators who are exposed to violent imagery and mind-numbing working conditions while labelling training data necessary for artificial intelligence systems.<sup>6</sup>
- Contested ownership of IP: Hollywood media production came to a halt due to strikes over ownership of creative output. The Screen Actors
   Guild – American Federation of Television and Radio Artists (SAG-AFTRA) strike aimed to protect writers and actors from the non-consensual use of artificial intelligence to replicate their voices, faces, and bodies,<sup>7</sup> while the Writers Guild of America (WGA) strike sought to prevent Al from replacing screenwriters.<sup>8</sup> In July 2024, video game actors went on strike to protest how motion-capture work could be used by artificial intelligence.<sup>9</sup>
- The consequential homogenisation of the creative landscape: Through a combination of repeated feedback-loop creations using generative AI models and adopted neural passivity (such as a sense of laziness arising in the creators through the process of working with AI),<sup>10</sup> the creative landscape could dramatically become homogeneous and flatlined - essentially losing its naturally human diversity - and some data shows that this is already happening across industries, like architecture, visual art, and product design. This is showing not just in relation to cultural diversity, as mentioned in the 'Growing disparity' section, but also purely in the interpretation of the natural language used in the prompting and the correlated quality of presented outputs - therefore interpretative homogenisation and aesthetic homogenisation.
- Entrenching existing inequalities via algorithmic bias: Years of serious scholarly work document patterns of algorithmic harms as bias in training data spreads unchecked through systems.<sup>11</sup> One example of an organisation connecting academic research to current policymaking and activism is The Algorithmic Justice League, which is led by a group of artists and researchers, including Dr Joy Buloamwini, author of *Unmasking Al*, who describes herself as a "poet of code".<sup>12</sup>

### Pressures on the process and outcomes of creative work

Exploring these concerns, the creative leaders who took part in this research highlighted another dimension of challenges specific to the creative industries. Both the process and outcome of producing creative works change in uncomfortable ways with artificial intelligence.

- Process: Al can threaten the pleasure of creative work: being part of the creative industries is not only a profession but a calling for many people. This leads to expectations that producing creative work is satisfying or pleasurable. The benefits of optimisation can be ambiguous in ways that threaten existing professional norms.
- Outcome: Al can produce average results

   in bad taste: the proliferation of artificial
   intelligence tools and the ease with which
   people without training can produce output
   has changed the dynamic in what was until
   recently the exclusive domain of experts.
   Some experts interviewed explained how
   creative practices can lose their prestige,
   and that there's an opportunity to illustrate
   boring, repetitive, and "bad taste Al" to move
   the entire field away from mimicry and
   towards excellence.

Participants in the UAE C4IR's workshops and interviews from creative industries realised that artificial intelligence is rooted in probabilistic modelling and applied statistics, and that these software programs have been specifically designed to seek statistical averages. When this underlying science is foregrounded and well understood, creative professionals have displayed a tendency to distance themselves from artificial intelligence, as they are loath to signal an appreciation for outputs that are empirically and scientifically average, described as "perpetuating the generation of generic content at a mass scale". Such signalling could damage their credibility in terms of the "good taste" value proposition - both in terms of craft and discernment - that undergirds most of the creative professions.

### **Exploring possibilities**

Through interviews with experts, clear messages emerged about the importance of creative work for celebrating the human condition, evoking emotion, uniting people, and exploring significant questions. Al tools offer potential to reshape professional practice and inform cultural production. These are some of the glimpses of a more creative future shared during research, categorised into three general attitudes: (a) augmentative; (b) practical; and (c) provocative.

#### What if AI could augment creativity?

Examples emerged signifying an overall positive view of artificial intelligence as augmentative, pushing forward the process and outcomes of creative practice. These professionals generally approach the technology as net-additive to the quality and/or nature of their work.

Building on cultural history: Alexander Kluge, a 92-year-old German philosopher, has been making films since 1960. In 2024 he released Cosmic Miniatures, an experimental film created with artificial intelligence. With an encyclopaedic knowledge of European culture, he seamlessly references Odysseus, Adorno, and Kant in discussing his work and the cultural framework necessary to make sense of machine-mediated art. "What exactly is the counterpart of the machine world of objectivity and therefore the counterpart of Al? It's not our intellects, our minds. If we isolate the human mind from empathy and emotion, then it's just a rattly old machine. ... What is needed is a healthy balance between objectivity and empathy." 13

– Alexander Kluge



Image: Unsplash

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From mimicry, to memory, to the collectivity of the urban environment, to the spectrality of biofeedback, each generation unlocks a new set of technical skills, creating stronger relationships between humans and machines." – Sougwen Chung Collaborating with robots: Chinese-Canadian artist Sougwen Chung paints in collaboration with robotic arms trained on years of her own drawings, so that the machine learning algorithms replicate and build on her own colour palettes and gestures.

Chung produces moody, evocative paintings with visible brush strokes while leading a conversation about the nature of human creativity. "I've recently finished the fifth generation of my robotic journey. Still, I feel like we're just getting started with this type of art and our understanding of the role of technology in art. From mimicry, to memory, to the collectivity of the urban environment, to the spectrality of biofeedback, each generation unlocks a new set of technical skills, creating stronger relationships between humans and machines. With each development, I find myself with more questions than answers."14 - Sougwen Chung

#### What if AI could make creativity more practical?

Meanwhile, other examples emerged that took a more practical (and in some cases even sceptical) view of artificial intelligence technology, viewing it not as augmentative to human creative practice per se, but as a useful tool for improving human efficiency and productivity.

Building skills: Dubai has been at the forefront of upskilling its residents, varying from working professionals to students. In line with Dubai's annual plan to accelerate the adoption of Al applications, a comprehensive programme has been launched to upskill all teachers in Al. This initiative is designed to enhance teaching practices by integrating AI technologies, with the goal of creating an educational system that equips students with future-ready tools and fosters an optimal learning environment. When it comes to the public sector, the Dubai Centre for AI has been launched with an aim to train government employees from over 30 government entities on the uses of generative artificial intelligence. Other global initiatives have promoted AI skills, such as the Global Prompt Engineering Championship, which included the wider public in participating in a first-of-its-kind competition that evaluated the participants' proficiency in innovating AI prompts through generative AI applications in coding, art, and literature. Prompt engineering has emerged as a critical skill in light of the recent surge in generative AI applications such as ChatGPT and Midjourney.

- Encouraging better screenwriting: Journalist and author Adrian Krey shared in a private interview that "if this is what ChatGPT 4.0 can do, then we need to be better", when discussing how three days of work plotting a new television series were duplicated in 20 minutes by AI assistant ChatGPT. Rather than retire or give up, this powerful experience led to the team critiquing their work with fresh eyes and acknowledging its mediocrity. If artificial intelligence, reproducing examples from training, outputs something so similar, it's a sign that the work is formulaic and not new. Being forced to re-think, reassess, and try again led the creative team to accept the challenge to do better.
- Personal in-depth understanding: (To be both augmentative and practical.) Al can be used as a form of self-questioning and self-analysis to have a discourse and conversation with your own creations and nurture your own point of view and personality. This iteration can support thinking on how to improve the creator's work and to understand where their own personal uniqueness lies. This refers to a multi-modal practice of working with both generative Al models and LLMs in a non-linear and non-chronological sequence of exchange between creation and questioning-conversation.
- Engineering design: Working with AI tools offers the opportunity to create better informed, better optimised, and more durable results that serve functional purpose. For example, in the field of architecture and building, urban masterplans and building architecture could be created in ways so as to pre-quantify and pre-simulate not only material construction, structural integrity, and sustainability factors but also post-occupancy liveability and future retrofit needs through digital twins.

#### What if AI could provoke experimentation?

Finally, a third category emerged that seemed to prioritise provocation and the raising of cultural questions. These examples seemed to emanate from a different core intention than examples in the augmentative category and were marked by the absence of any outwardly clear ethical position regarding the technology.



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My answer is that no one is ever suggesting that there shouldn't be human poets, we're just saying if you walk into Trafalgar Square and you weren't about to write a poem, you can take part in one." Playful, public, poetic art: Six years later, British artist and theatrical designer Es Devlin's project for the iconic lions in London's Trafalgar Square to spout artificial intelligence poetry still feels fresh and provocative.<sup>15</sup> Demonstrating that public art does not need the latest, most powerful AI to galvanise a cultural conversation, this 2018 collaboration with Google's Ross Godwin powered by a dataset of poetry addresses place-making, memory, and public participation. "There will be people who say: 'why didn't you just get a poet?' or 'why do you need machine learning and algorithms?' There is always going to be this guestion in relation to what end machine learning and algorithms can augment human capacities and not replace them. My answer is that no one is ever suggesting that there shouldn't be human poets, we're just saying if you walk into Trafalgar Square and you weren't about to write a poem, you can take part in one."16 - Es Devlin

Near-effortless music: American artist and creative technologist Burton Rast explores the boundaries of ownership and cultural production in music with his provocative artificial intelligence-created music. He describes spending just two hours using commercially available tools to produce, distribute, and monetise music. Building on the surprising finding that song titles cannot be copyrighted, he asked ChatGPT to create a list of twelve song titles combining two existing popular songs, with the intention of benefitting from search algorithm optimisation. ChatGPT also created the name of a group and album. Using textual prompts such as "throwback Appalachian folk music upbeat low-fi" in music-creation software Suno, he produced songs and used DistroKid publication service to release the songs on music platforms such as Spotify, YouTube, and Apple Music. The album went live on April Fool's Day (1 April) 2024 and remains up despite a legal complaint against Suno.<sup>17</sup> Rast intends his work as a provocation on the bounds of what's permissible in artificial intelligence and the creative industries and raises uncomfortable questions to educate and inform.

"I very much enjoy using emerging AI technologies to create new-to-the-world experiences. That said, I very much understand why artists and authors and publishers and musicians and songwriters are so upset about their work being used as training data without permission or compensation."<sup>18</sup> – Burton Rast

It is important to note that these categories are not mutually exclusive – one creative professional may occupy more than one category at more than one time depending on the creative endeavour at hand. There is significant grey area – and often overlap – between and among these attitudinal groups, although the discrete motivations that they seem to represent appeared repeatedly. In all cases, whether engaging with artificial intelligence for predominantly augmentative, practical, and/or provocative reasons, these creatives found motivation to embrace and deploy the technology to achieve various aims in their professional lives.

# 4

# **Growing Disparity**

The rapid advancement of AI in creative industries has sparked significant disparities, including how benefits and opportunities are distributed across different sectors and communities.

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While AI can significantly reduce production costs and increase output, the financial rewards often accrue to those who own the AI platforms or have the capital to invest in them. As Al continues to evolve, a growing gap is emerging between those who have access to cutting-edge technologies and the resources to leverage them, and those who do not. This disparity is not only technological but also socio-economic and cultural, leading to unequal opportunities for creators and innovators globally.

**Cultural disparity:** Al's impact on creativity raises concerns about cultural homogenisation. As AI models are typically trained on large datasets that may not fully represent the diversity of global cultures, there is a risk that AI-generated content will reflect and perpetuate dominant cultural norms, marginalising less represented voices. This could lead to a loss of cultural diversity in creative outputs, with AI favouring the replication of mainstream trends over the exploration of niche or indigenous artistic expressions.

**IP disparity:** The application of traditional IP laws to AI-generated content has highlighted disparities in how creators' rights are protected. Legal frameworks designed to safeguard human creativity often fall short when applied to AI, leading to confusion and conflict over ownership and compensation. This has resulted in a series of high-profile lawsuits, as stakeholders seek to navigate the complex landscape of AI and IP rights. These legal battles not only underscore the existing disparities but also have the potential to exacerbate them, as larger entities are better positioned to engage in lengthy and expensive litigation.

**Socio-economic disparity:** The economic benefits of AI in creative industries are not evenly distributed. While AI can significantly reduce production costs and increase output, the financial rewards often accrue to those who own the AI platforms or have the capital to invest in them.



Image: Unsplash

This creates a scenario where wealthier organisations can scale their output and dominate the market, leaving smaller creators struggling to compete. Amplifying this disparity is the fact that access to the Al tools that automate and enhance various aspects of content creation is often limited to well-funded organisations and individuals with the technical expertise to use them effectively. Smaller creators, particularly those in less developed regions, may lack the resources or knowledge to utilise these technologies, widening the gap between large and small players in the creative field.

To address these growing disparities, it is crucial to take an inclusive approach that ensures equitable access to AI technologies, fair distribution of economic benefits, and the protection of cultural diversity. This requires collaboration across sectors, including technology developers, regulators and policymakers, and creative professionals, to create a more balanced creative ecosystem where the advantages of AI are shared more broadly and fairly.

### 5

# Guidelines for Al in Creative Industries

The guidelines aim to support stakeholders in the creative industries – including developers, professionals, and regulators. They focus on transparency, inclusivity, and people-centrism.

### Purpose

These guidelines offer a comprehensive framework to help stakeholders in the creative industries navigate the complex intersection of Al technology and creative expression. As Al continues to play an increasingly prominent role in creative processes, it is crucial for industry stakeholders to understand how to effectively and ethically integrate these technologies while preserving the essence of human creativity.

#### Beneficiaries

Specifically, these guidelines are designed to assist:



**Technology developers:** Al developers and tech companies can refer to these guidelines to align their tools and solutions with the ethical considerations of the creative community, ensuring that their innovations support rather than undermine human creativity.



**Creative professionals:** Artists, writers, musicians, and other creators can use these guidelines to understand how AI can complement their work, protect their IP, and explore new avenues for creativity.



Image: Unsplash

**Policymakers and regulators:** Governments and regulatory bodies can use these guidelines to craft policies that foster responsible AI use in the creative industries, balancing technological advancement with the protection of cultural heritage and creative rights.

In addition to these beneficiaries, consumers and the public can refer to these guidelines as a tool to better understand the actions of creators, developers, and regulators in relation to the use of AI. Following the guidelines will lead to lower disparity among stakeholders. The guidelines are structured around key principles that address the ethical, technical, and social dimensions of AI in the creative industries. Each section offers actionable insights and best practices, accompanied by real-world examples and case studies to illustrate how these principles can be applied in practice.

#### **Key Areas Covered**

#### Transparency

Why is this important?

Transparency is critical in the integration of AI within the creative industries because it builds trust, ensures accountability, and enhances the ethical application of technology. In an era where Al-generated content is becoming increasingly sophisticated, it is essential for stakeholders to have a clear understanding of how AI tools are developed, trained, and deployed. Transparency allows creators to know how their data is used and ensures that Al-driven processes do not operate as 'black boxes' that could lead to unintended biases or ethical concerns. By prioritising transparency, the creative sector can mitigate the risks associated with AI, such as the potential for misinformation or the misappropriation of IP, while fostering an environment of trust and collaboration among all stakeholders.

#### Inclusivity

Why is this important?

Inclusivity ensures that the benefits of AI are distributed equitably across different communities and cultures. AI has the potential to democratise creativity by providing tools and resources that were previously inaccessible to many. However, if not carefully managed, Al could also amplify existing inequalities, particularly by marginalising underrepresented voices or favouring dominant cultural narratives. By embedding inclusivity in Al development, application, and regulation, the creative industries can empower a diverse range of creators, protect cultural heritage, and promote a richer, more varied creative output. This approach not only enhances creativity but also strengthens the cultural fabric of societies globally.

#### People-centrism

Why is this important?

As AI continues to blur the lines between human and machine creativity, it is crucial that regulations keep pace to protect creators' rights and promote fair competition and keep humans at its centre. Regulatory measures should focus on preventing the misuse of Al-generated content, ensuring that innovation does not come at the cost of IP rights or cultural integrity. By establishing clear guidelines for the ethical use of AI in creative processes, regulators can create an environment where people-centred innovation thrives, benefiting society while safeguarding the interests of creators and the public. A people-centred approach will help maintain a balance between technological advancement and the preservation of artistic and cultural values



Image: Pixabay

# Guidelines

Transformation can be uncomfortable, and the potential harms of artificial intelligence highlight the need for thoughtful leadership to guide not only the creative industries but society at large. Such leadership must be globally representative, and independent of economic concerns such as returning shareholder value for an individual technology company. There remains an exciting potential for more people to produce a greater volume of work that is even more creative, and clearly articulated statements of value are a solid basis for this transformation.



- Centre people at every step: Collaborative work mapping artificial intelligence supply chains (encompassing infrastructure, models, safeguards, licensing, documentation, and product) exposed ways in which safeguarding people from harms is a cross-cutting, urgent need. Beyond being people-centred, a vision of inclusive creativity recognises the shared humanity at the heart of creative expression.
- Embrace complexity and nuance: There is power in acknowledging the nuanced complexities of artificial intelligence within creative industries. Articulating potential harms does not need to stifle innovation; rather, embracing the challenges of socio-technical change can strengthen protections and lead to more desirable outcomes: a healthier planet, meaningful work, upholding digital rights, and beyond.
- Respectfully question artificial intelligence: Instead of seeking easy answers, formulate impactful questions challenging the processes and outcomes of creative work. Producing work of enduring value in the creative industries requires more than reacting to hype-cycles uncritically promoting the benefits of artificial intelligence. Acknowledging the unknowns while committing to a mindset of curiosity and respect lays the groundwork for a more inclusive, creative future.

These guidelines are intended as a living document, to be updated regularly in response to ongoing developments in AI and the creative industries. As such, feedback and input from all stakeholders are welcomed to ensure that these guidelines remain relevant and effective in supporting a vibrant, inclusive, and ethical creative future.

While principles alone are insufficient to access the transformative potential of artificial intelligence for the creative industries, we have divided them according to a scale of necessity (from low to maximum) to indicate which ones might require more urgent action. There is a strategic opportunity for stakeholders to support appropriate development and tools, methods, and practices. These are three specific steps to delivering the promise of artificial intelligence to a global audience in an intentional manner.



# Guideline



### Maximise transparency

The powerful economic impact of creative industries is clear. According to the United Nations Conference on Trade and Development, it was a USD 1.4 trillion industry in 2022, with the export of creative goods reaching USD 713 billion, a 19% increase since 2017.<sup>20</sup> The value of creative expression goes far beyond the monetary and into intangible cultural heritage. Creative production has a transformative potential to unite people around a shared vision for humanity.

To navigate environmental, labour, and social concerns, clearly name the intentions, including limiting experimentation in areas of unacceptable risk, such as those identified as high-risk according to the EU AI Act,<sup>21</sup> for example, not using artificial intelligence to score winners of creative competitions and award access to life-altering resources.

#### **Principles for Developers**

- Work in a trans-disciplinary way: Consider how the creative industries engage society across sectors.
   Potential activities could include bringing together stakeholders from economics, natural resources, and culture.
  - (Maximum)
- Introduce an 'Al Disclosure Statement' that briefly describes the type of data used in training the LLM.
   This would enhance transparency and help users understand the potential biases and limitations of the Al.
  - (Maximum)
- Cultivate creative excellence: Increasing participation and producing quantifiably higher amounts of outputs are not the only measure of artificial intelligence impact. Recognising variations in quality and investing in elevating standards are also important. Potential activities include mentorship programmes connecting traditional creative leaders with emerging technical talent and increasing exposure to high quality creative output through public institutions.
  - (Medium)
- Introduce the concept of a 'Creative In-Residence' a person embedded within the development team who constantly challenges the process and helps the team identify blind spots in their work. This role would be crucial in maximising transparency and ensuring that potential issues are addressed before they become significant problems.
  - (Marginal)

#### Principles for Professionals

- Those who use AI should be transparent about it:
   For instance, Coalition for Content Provenance and Authenticity's Content Credentials "icon of transparency" mark<sup>22</sup> is an example of how creators can disclose their use of AI in their work. This mark has been gaining popularity recently, as creators who use AI are applying it to their work to disclose that AI was involved in the creation process.
- Take a broader view beyond financial impact:
   Promoting economic empowerment and supporting entrepreneurship are useful goals for the creative industries. Potential activities that expand the goals of artificial intelligence beyond economic empowerment could include calls for contributions to cultural patrimony, efforts to inform/inspire the public, developing educational programmes that make AI systems more explainable and transparent, and strengthening civil society by enhancing digital rights.

#### **Principles for Regulators**

 Collaboratively identify measurable goals: Create contexts where experts as well as the general public can participate in shaping what creative artificial intelligence projects should do. Potential activities could include hosting dedicated events, creating educational resources, and cultivating a network of experts.

(Maximum)

# Guideline Be inclusive

88

The creative industries are global, and essential conversations must happen at the regional and local level. Research from Stanford's Artificial Intelligence Index Report 2024 indicates strong regional differences, with Indonesia and Thailand leading in positive feelings about AI, while France and the United States are the most negative:

"Al sentiment in Western nations continues to be low but is slowly improving. In 2022, several developed Western nations, including Germany, the Netherlands, Australia, Belgium, Canada, and the United States, were among the least positive about Al products and services. Since then, each of these countries has seen a rise in the proportion of respondents acknowledging the benefits of Al, with the Netherlands experiencing the most significant shift." – Ipsos Global Views on Al July 2023, as reported in Stanford's Artificial Intelligence Index 2024.<sup>23</sup>

#### **Principles for Developers**

Invest in infrastructure for experimentation:
 Infrastructure means more than just technology;
 platforms also encompass ways of distributing
 operational knowledge. Finding ways for knowledge
 to flow globally is important for communicating
 experimental successes as well as failures. Potential
 activities include sharing operational playbooks for
 hosting events (discussion guides, calls for proposals,
 conferences, exhibitions, training sessions), producing
 templates (for magazines, card games, slide decks,
 workbooks, etc), and developing curricula (training,
 judging, public awareness campaigns, etc).

#### Principles for Professionals

 Regionalise outputs: With a mosaic of experiences, attitudes, hopes, and dreams for artificial intelligence, a global one-size-fits-all approach with a narrow focus on maintaining the centralised power of Silicon Valley misses the moment. Potential activities include translating resources into local languages, respecting intergenerational dialogue, and hosting discussions crossing socio-economic boundaries.

(Maximum)

#### **Principles for Regulators**

 The global network of C4IRs is an ideal platform for peer learning, with opportunities for sharing both experiments and outcomes between locations to scale successes and limit harms. The network focuses on advancing public-private partnerships and creating policy frameworks that ensure the responsible, inclusive, and ethical deployment of AI. These guidelines are intended as a reference that the C4IRs can apply and reflect in their own discussions on AI applications in the creative sector.

# Guideline Be people-centred

The realm of creativity is traditionally associated with human ingenuity. Humans are the inventors of the AI tools that are now pervading the world. In addition, humans are the consumers and recipients of the creative outcome. A people-centred AI will support the development of a creative sector that fully represents society and its different facets.

#### **Principles for Developers**

Enable personalised model training and income opportunities for creators: As it stands today the machine learning algorithms of AI models improve over time and learn more over time through the process of participation and usage by the human counterpart (creators and individuals); this process of first-person iterative training is not transparently acknowledged, recognised, or compensated on most platforms and it is extremely valuable. It would be beneficial and more encouraging to creators if this was a customisable option and a potential opportunity for proprietary self-owned value. It would be incredibly useful for example if creators could opt to train and develop their own personal models within the artificial intelligence software to specifically train their own personal outputs only and not feed back to the general algorithm. This way creators could also be offered a 'marketplace' to make their models optionally available for usage by paid royalty or license fee to other individuals or companies interested in their work/models.

(Maximum)

#### Principles for Professionals

Recognise your value and deeply inform yourself
on all the 'mechanics' and iterative processes
at stake integrally within AI workflows. Know
where are and what are your valuable assets and
contributions and understand how to protect them.
Seek conversation and opportunity of discourse
with developers and ask for options available for
individual/bespoke usage of the AI.

(Medium)

#### **Principles for Regulators**

Embrace dialogue with a diverse range of creators
 and direct users of the AI; study all situations and
 workflows involved in creating and collaborating
 with the machine. Adapt and morph an understanding
 on how to identify the boundaries between
 human-intervention and machine-intervention.
 Only by knowing where the human act and the human
 talent lies can we make informed decisions on how
 to protect the creative industries and its human players.
 (Maximum)

# Conclusions

It is essential to adopt a balanced approach that fosters innovation while safeguarding people's creativity, guided by transparent, measurable goals that prioritise ethical considerations, inclusivity, and respect for cultural diversity.

Al is undoubtedly transforming the creative industries, offering both unprecedented opportunities and significant challenges. The qualitative research conducted with senior creative leaders reveals that Al has the potential to revolutionise creative processes, push the boundaries of artistic expression, and democratise access to creative tools. However, this transformation comes with concerns that cannot be overlooked, particularly regarding systemic harms, professional consequences, and the preservation of human creativity and cultural heritage.

The opportunities presented by AI in the creative industries are immense. AI can automate repetitive tasks, allowing creators to focus on more complex and meaningful aspects of their work. It can extend creative possibilities, offering new tools for experimentation and innovation. AI has the potential to bring more voices into the creative conversation, enabling individuals who may not have had access to traditional creative avenues to contribute to the global cultural landscape.

Despite these benefits, there are significant concerns about the impact of AI on the creative process and the quality of creative outputs. The ease with which AI can produce content has raised questions about the value of human creativity in an age where machines can replicate, enhance, and even create artistic works. The risk of cultural homogenisation is particularly troubling, as AI-generated content may prioritise mainstream trends at the expense of diverse and marginalised voices. Additionally, the environmental impact of AI, particularly in terms of energy consumption and resource use, cannot be ignored.

Moreover, the application of traditional IP laws to AI-generated content has highlighted disparities in how creators' rights are protected. Legal frameworks designed to safeguard human creativity often fall short when applied to AI, leading to confusion and conflict over ownership and compensation. The series of high-profile lawsuits against AI companies underscores the urgency of reevaluating IP laws to ensure they are fit for the challenges posed by AI.

To navigate these complexities, it is essential to adopt a balanced approach that fosters innovation while safeguarding human creativity. This approach should be guided by transparent, measurable goals that prioritise ethical considerations, inclusivity, and respect for cultural diversity.

Key recommendations highlight the need for continued multidisciplinary collaboration, involving not just technologists and legal experts but also creatives, ethicists, and cultural leaders. This collaboration is crucial for developing comprehensive guidelines that address the ethical, technical, and social dimensions of Al in the creative industries.



Image: Pixabay

 Al has the potential to bring more voices into the creative conversation, enabling individuals who may not have had access to traditional creative avenues to contribute to the global cultural landscape.

### Appendix

#### Methodology

Between October 2023 and September 2024, a global group of experts working at the intersection of AI and creativity participated in various research activities that informed this report.

#### - Primary data:

The study employed group workshops using participatory design methods (two virtual and four in-person, with 67 participants), interviews with experts' and small-scale surveys and opinion polls, not for statistical analysis but to synthesize insights into an actionable vision for AI in the creative industries.

#### - Secondary data:

Participation in this research was limited to experts vetted to be senior, with more than 15 years' experience, and producing work with global impact. Snowball sampling was used to expand expert participation.

In addition, the policies and regulations summarised in the table below were used for reference.<sup>24</sup>

Country/Region	Al policies/regulations
UAE	The UAE has set out a comprehensive National Strategy for Artificial Intelligence 2031, <sup>25</sup> published a guide on the use of generative AI, <sup>26</sup> and launched the UAE AI Charter. <sup>27</sup>
EU	The EU has agreed on an EU AI Act, the world's first extensive AI law. As an effect, AI applications deemed to cause a "high risk" will be subject to new EU standards. <sup>28</sup>
USA	Presidential Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence. <sup>29</sup> Several US National legislations are focusing on the application of AI in consequential decisions, on reducing discrimination, and protecting consumer rights. <sup>30</sup>
African Continent	The African Union has released a strategy to harness AI for Africa's prosperity and development. <sup>31</sup> Some countries in Africa (such as Rwanda, Nigeria, and South Africa) are expected to announce national AI strategies. <sup>32</sup>
Singapore	Singapore released, at the end of 2023, a National AI Strategy 2.0 focusing on AI as a public good for Singapore and the world. <sup>33</sup>

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