

Dreaming Digital:

**Mapping the
Intersection of AI
and the Arts**

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Acknowledgments

This research was conducted as part of the Mozilla Foundation Fellowship program, in partnership with L'Art Rue, Tunisia. This study emerged from a shared recognition that the rapid ascent of Artificial Intelligence demands a critical, nuanced examination of its impact on artistic creation, cultural heritage, and social equity, particularly across Africa and the Middle East.

I extend my deepest gratitude to the Mozilla Foundation for its unwavering commitment to supporting independent research focused on an open, accessible, and humane internet. The Foundation's support and framework were instrumental in enabling the rigorous, multi-sited inquiry presented in this report. Although this research received their support, its content remains the sole responsibility of the author.

I am profoundly indebted to L'Art Rue, Tunisia, for serving as the primary institutional partner and providing an essential intellectual home for this work. The organization's long-term investment in socially engaged art, its deep connections to the local and regional arts community, and the dynamic platform offered by the Dream City 2025 provided an invaluable grounding for the theoretical elements of this study. The insights and contextual knowledge offered by the L'Art Rue team were crucial to mapping the intersection of technology and creative practice in the region.

I also thank the artists, cultural practitioners, technologists, and stakeholders across the MENA and African regions who generously shared their time, experience, and critical perspectives through interviews and informal discussions. Their personal accounts of navigating digital tools, linguistic barriers, and infrastructural constraints formed the human core of this research.

Finally, AI-assisted writing tools were used during the preparation of this report to support drafting, summarization, and language refinement across diverse and complex topics. All conceptual frameworks, analytical interpretations, and final text were reviewed, verified, and finalized by the author to ensure academic accuracy and integrity.

About L'Art Rue

L'Art Rue is a cultural organization based in Tunis dedicated to fostering artistic creation, civic engagement, and inclusive public space. Established in 2006, it supports interdisciplinary artistic practices through residencies, training programs, youth initiatives, and long-term collaborations with local communities. Its work positions art as a catalyst for social inquiry, collective imagination, and dialogue across diverse publics. While deeply rooted in the Medina of Tunis, L'Art Rue engages regional and international partners to nurture artistic ecosystems that reflect the complexity and vitality of contemporary society.

Guided by a commitment to openness, experimentation, and public accessibility, L'Art Rue produces initiatives that link artistic expression with social realities, including its flagship biennial, Dream City, which transforms urban space into a site for performance, research, and shared reflection. The organization maintains a sustained investment in artists, educators, and cultural practitioners, supporting them as they explore new forms of collaboration and community-based creation. Through this work, L'Art Rue continues to advance a vision of culture as a public good, grounded in participation and shaped by the voices of those who inhabit the city.

About the Mozilla Foundation

Mozilla Foundation is a global nonprofit committed to protecting an internet that is open, accessible, and grounded in the public interest. Created in 2003, it advances human-centered technology through grantmaking, advocacy, fellowships, and independent research. Although this research received support from the Mozilla Foundation, its content does not necessarily represent the Foundation's views.

Anchored in the principles of the open web and shaped by the commitments of the Mozilla Manifesto, the Foundation works across issues such as trustworthy AI, privacy, and digital rights to strengthen a healthier online environment. Its programs bring technologists, researchers, civil society leaders, and policymakers together to imagine and build systems that uphold transparency, accountability, and collective empowerment. With more than twenty years of international engagement, Mozilla Foundation continues to champion a future where technology serves people and remains open, fair, and responsive to the needs of diverse communities.

About the Author

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His career includes senior roles at Google and Meta as Public Policy Manager for the Middle East and Africa, where he led engagement with governments, telecom operators, civil society, and multilateral organizations on issues of connectivity, digital transformation, and online rights. He also served on advisory bodies for the World Bank, AfriNIC, and several global technology governance initiatives.

Koubaa is Founder and CEO of AT Worthy Technology Inc., where he develops rating systems and governance frameworks for AI agents, digital infrastructure, and online trust. His current research examines AI readiness, AI governance, and the socio-political impacts of artificial intelligence in the Global South.

Dreaming Digital:
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of AI and the Arts
Middle East and Africa

0. Executive Summary

This report examines how artificial intelligence integrates into artistic practice across Africa and the Middle East. It is a “State of Play”: a mapping and analytical study of current practices, conditions, and tensions. Any forward-looking elements are framed as perspectives and openings that emerge from the analysis, rather than as a strategy or implementation plan.

The study finds that the region’s engagement with AI is shaped less by technical enthusiasm than by uneven access to infrastructure, training resources, and locally relevant tools. Artists work within environments marked by uneven connectivity and power reliability, high hardware costs, and commercial AI systems calibrated to global markets that often miss local cultural and linguistic contexts. These conditions create practical barriers that slow experimentation and influence the forms of creativity possible.

Despite these challenges, artists and cultural practitioners are developing approaches that adapt AI tools to local needs. Emerging initiatives that focus on African and Arabic languages, community-led datasets, and collaborative learning environments illustrate a growing interest in shaping AI toward regional realities. Their work highlights the need for systems that support inclusive representation, accessible tools, and sustainable creative workflows tailored to distinct artistic and cultural ecosystems. Language emerges as a central axis in this landscape, shaping both creative possibility and exclusion.

Tunisia reflects this broader landscape. The country pairs early startup legislation and a growing technology sector with persistent bandwidth constraints, intermittent energy supply, and limited dedicated funding for AI-related cultural production. Institutions such as L’Art Rue, 32bis, and B7L9 shape the cultural environment in distinct ways, although none currently maintains programs designed specifically for AI in the arts. L’Art Rue stands out for its long-term investment in socially engaged practice and for the role Dream City plays as a space where artistic experimentation intersects with digital technologies.

The study identifies several gaps that shape the AI arts ecosystem. These include limited research on how artists actually use AI, insufficient institutional support for independent practitioners, and a lack of technical resources adapted to languages such as Arabic and Swahili. Further work is needed to document current practices, understand regional patterns, develop sustainable models for AI-based artmaking, and assess how artists navigate technical and ethical considerations.

The goal is to generate a clear, accessible analysis that helps cultural actors understand where AI is opening new artistic possibilities and where it introduces practical constraints. By identifying patterns across artistic disciplines, mapping emerging needs, and documenting how institutions like L'Art Rue can play a constructive role, the study aims to inform future reflection and programming discussions. It offers grounded insights and analytical perspectives for cultural organizations seeking to engage with AI in ways that strengthen artistic practice, broaden participation, and support a diverse and innovative cultural sector across the region.

1. Introduction

1.1 Purpose of the Study

This study investigates how artificial intelligence is influencing artistic practice, cultural production, and creative ecosystems across Africa and the Middle East. It documents technological, societal, and cultural conditions shaping AI adoption, and it identifies the threats, opportunities, and ethical stakes emerging for artists in the region.

The aim is to provide a structured, context aware analysis that helps cultural organizations understand where AI is already present in artistic practice, where it is absent, and why.

By documenting current experiments, perceived risks, and emerging needs, the research seeks to inform future reflection and institutional conversations on how artists and cultural organizations might engage with AI in a thoughtful and sustainable way.

This report maps practices, conditions, and tensions as they currently appear across the region. Any forward-looking elements are presented as perspectives and openings that emerge from the analysis, rather than as recommendations, prescriptions, or an operational strategy.

1.2 Research Questions

The inquiry is guided by four core questions:

- How are artists in Africa and the Middle East currently encountering and using AI tools in their creative work, if at all?
- What infrastructural, economic, linguistic, and organizational factors shape their ability to participate in AI driven cultural production?
- How are cultural institutions in the region beginning to position themselves in relation to AI in their programs with artists and communities?
- What forms of guidance, training, and support could help socially engaged cultural organizations develop responsible, locally grounded approaches to AI?

These questions situate AI within real artistic and institutional workflows. The study is less concerned with speculative futures and more concerned with how AI is already reshaping decisions about tools, time, funding, collaboration, and public engagement.

1.3 Research Context

The research is developed as part of the Mozilla Fellowship hosted by L'Art Rue, a Tunis-based cultural organization known for its focus on socially engaged artistic practices and work in public space. Through long-term relationships with artists, communities, and partner institutions, L'Art Rue has built a distinctive ecosystem in which artistic creation is closely linked to everyday urban life and social concerns.

Within this ecosystem, the Dream City festival occupies a central place. It gathers local and international artists who develop projects rooted in the city and its inhabitants. Findings in this study draw on desk research across international and local sources, and field observation during the Dream City 2025 in Tunis, Tunisia. The festival offered a valuable environment for observing how these tools appear in practice, how artists talk about them, and how audiences respond to digitally mediated works.

1.4 Why Africa and the Middle East

Across Africa and the Middle East, artists are working within rapidly evolving digital environments. Generative models for image, text, sound, and video are becoming more visible, while basic conditions for experimentation such as stable electricity, adequate hardware, and affordable connectivity remain uneven. Some countries are investing in large-scale digital infrastructure and innovation hubs. Others face persistent constraints that make sustained work with data-intensive tools challenging for many practitioners.

In this context, AI touches the arts in several ways at once. It appears in creative workflows when artists explore new forms of composition, editing, or interactive experience. It affects how cultural content is discovered and circulated through platforms that rely on recommendation systems and automated moderation. It also introduces new questions about authorship, ownership, and the kinds of skills that artists and cultural workers require to remain active and visible.

The arts provide a particularly sensitive lens for observing these shifts. Artistic projects often make emerging technologies tangible long before they are fully normalized in everyday life. By following how artists talk about AI, test it, embrace it, or reject it, we gain insight into broader questions of trust, literacy, and access in the digital environment.

For cultural organizations, this perspective can inform how they think about programs, residencies, and partnerships that are realistic about local conditions while remaining open to experimentation.

A previous Mozilla fellow, Lebanese activist and researcher Nadine Moawad [1], worked with Mawred (a non-profit organization that seeks to support artistic creativity in the Arab region) on Culture 3.0, a pilot grants program exploring fairer labor and income models for artists working in digital spaces. Her work focused on how artists in the region might gain more control over the terms of their income and experiment with collective and cooperative forms of ownership. That fellowship demonstrated that questions of artistic sustainability, economic justice, and platform governance are inseparable from the future of digital culture in the Arab world.

This current research with L'Art Rue builds on that lineage while shifting the emphasis from digital labor conditions to the specific ways AI systems reshape artistic practice, cultural memory, and community-based work in Tunisia and across the wider region.

1.5 International Context

The global conversation on AI and the arts is evolving through three distinct but overlapping frameworks: ethical advocacy, technological development, and regulatory governance.

Ethics, Rights, and Human Agency:

Major international bodies are prioritizing the protection of artistic freedom and human rights within the digital age. UNESCO plays a central role here, using its 2021 Recommendation on the Ethics of AI [2] to advocate for fair remuneration and intellectual property protection. This aligns with broader sentiments expressed at the UN Digital Cooperation Day [3], where dialogues emphasized that AI must not obscure the structural realities of labor and inequality. These initiatives stress that algorithmic efficiency cannot replace human agency or the "audacious hope" central to artistic expression.

Innovation and Development:

Parallel to ethical concerns, institutions are promoting AI as a driver for the UN Sustainable Development Goals (SDGs). The International Telecommunication Union (ITU), through its AI for Good platform [4] and "Canvas of the Future" competition [5], positions artists as visionaries who can guide technological innovation. Similarly, the AI Action Summit in Paris [6] has integrated culture into its agenda, exploring how AI can reshape museums and aid in heritage preservation. These platforms frame AI not merely as a disruptor, but as a potential tool for cultural sustainability and modernization.

Regulation and Copyright:

The most concrete friction is occurring in the regulatory sphere, led by the European Union. The EU AI Act [7], which entered into force in August 2024, attempts to enforce transparency regarding training data. However, this has sparked significant conflict. Implementation measures have been strongly criticized by creative industry coalitions [8] for failing to offer meaningful copyright protections in practice. This ongoing debate in Europe highlights the global difficulty of balancing the economic drive for AI innovation with the legal rights of human creators, a tension that will inevitably impact artists in Africa and the Middle East seeking to enter global markets.

2. Historical and Theoretical Frameworks

2.1 AI as Socio-Technical Infrastructure

AI does not emerge as a neutral technological milestone. It grows out of long-standing patterns of concentrated control shaped by the extraction of data, the centralization of computing power, and the dominance of a small set of global actors. The AI Now Institute captures this dynamic by describing contemporary systems not as artificial intelligence but as “Artificial Power” [9], a structure that amplifies influence for those who already possess it. This perspective changes how AI is understood within artistic practice. The central question is not whether a system can approximate a painterly gesture but how it operates inside a layered infrastructure built from data pipelines, computational resources, software ecosystems, cloud environments, and specialized expertise. These elements function together rather than separately, defining what artists can attempt, how long experimentation requires, which tools fall within reach, and what kinds of collaboration can be maintained. Taking AI as socio-technical infrastructure redirects attention from abstract capability to situated conditions. A text-to-image model becomes relevant only when an artist can rely on consistent bandwidth to handle large files, devices capable of running updated software, and stable environments where new workflows can unfold. This lens guides the study: instead of asking what AI can achieve in theory, it examines what AI can support within the specific environments where artists in the region build their practice.

2.2 Global South Stakes: Culture at Risk, Not Only Creativity

Across Africa and the Middle East, the concerns surrounding AI diverge sharply from those that dominate Western discourse. What Western debates often reduce to “bias” manifests in the Global South as an existential threat to cultural identity, linguistic continuity, and collective memory.

UNESCO warns [10] that imported AI tools used in African education, trained almost entirely on Western data, risk “erasing indigenous values.” These systems nudge students toward “Western speech and the worldviews it embodies,” sidelining local knowledge systems.

Scholars describe this process as “cultural erosion.” AI models may reproduce the visual appearance of African or Arab artistic styles, but they cannot reproduce the “significance of history or ritual layers” embedded in those traditions. Heritage collapses into aesthetic commodity.

This concern carries geopolitical weight. During a recent World Bank convening [11], African creatives voiced deep anxiety that adopting foreign-built AI systems will reinforce “dependencies on foreign technologies” and “stifle authentic cultural representation.” UNESCO argues that such harms cannot be resolved by mere “debiasing.” Instead, the path forward requires building “endogenous momentum”, local ownership over data, tools, infrastructures, and design principles.

In the Global North, artists fear AI may dilute individual creativity. In Africa and the Middle East, the fear is far more severe: that AI will erode collective cultural identity and reproduce digital colonialism under new technical veneers.

2.3 Algorithmic Colonialism

Abeba Birhane’s concept of “algorithmic colonialism” [12] situates these contemporary anxieties in a longer continuum of imperial extraction. Where colonial regimes once removed raw materials and imposed administrative systems, today’s tech monopolies extract African data, deploy AI infrastructures built elsewhere, and encode Euro-American worldviews into technical systems presented as universal.

The structural imbalance is stark:

- Only 2% of global AI training data comes from Africa [13]
- African data centers accounted for less than 1 percent of the global total in 2024 [14]
- 95 percent of Africa’s submarine internet cables are foreign-owned [15]

The Pan-African Parliament (PAP) has declared the issue a continent-wide crisis of data sovereignty. This concern was echoed during a two-day high-level workshop hosted by the PAP on “Building Parliamentary Capacity for AI Governance and Inclusive Digital Transformation,” [16] where data experts delivered a stern warning: “If our data is not representative, the AI systems we use will not reflect our realities.”

These dynamics directly shape artistic work. Nigerian artist Malik Afegbua attributes [17] the bias in generative AI to its training data, which is rooted in colonial-era photography and media narratives that historically framed Africans as subjects of suppression, compelling him to use his own data to correct the system’s output.

Palestinian-Iraqi-American artist Ameera Kawash identifies this as “futuricide” [18]: AI-generated scenes depicting Palestinians in perpetual devastation, absent perpetrators, normalizing violence through repetition. Training datasets replicate colonial visual regimes that depict Africa as wilderness or conflict, and the Middle East as ruins. These aesthetic choices are not accidental; they are consequences of data extraction and historical imbalance.

2.4 Tunisia as an Indicative Case

Tunisia occupies a distinctive place in the regional landscape. It ranks fifty seventh in the Global AI Worthiness Index 2025, and fifth on the African continent. The 2018 Startup Act created the first dedicated AI startup framework in Africa, and the 2023 acquisition of InstaDeep by BioNTech [19] for six hundred eighty two million dollars signals a remarkable domestic capacity. Yet these gains unfold alongside structural constraints. National internet penetration sits at 60 percent of households [20], but the average price for a month of business broadband connection with at least 10 Mbps download speed with unlimited data usage is 25 USD. Conditions of this kind render experimentation in AI driven art slow at best and often impossible. Tasks that take minutes in Silicon Valley can demand hours in Tunis or Sidi Bouzid.

For practitioners in visual arts, performance, music, and film, these realities shape daily routines. Uploading large video files, synchronizing sound projects, or iterating on AI-assisted visual sequences may involve long waiting times and careful planning. Technical experimentation often happens in parallel with other work and in shared environments such as cultural centers, coworking spaces, or cafés.

L’Art Rue’s ecosystem sits inside this context. The organization actively hosts and collaborates on programs, such as TACIR (Talents-Arts-Creativity-Inclusion-Research), which focuses on fostering social inclusion and creativity among youth in the western regions of Tunisia.

Dream City and other programs, often in partnership with national and regional institutions, work with a mix of analog and digital methods. Artists associated with these programs, including those highlighted in the TACIR-Dream City [21] exhibitions and screenings, have begun to test generative tools, coding environments, and interactive installations (as seen in the IMMERSIA: Digital Stories by TACIR component). Others remain focused on site-specific practices, community engagement, and low-tech interventions.

2.5 Theoretical Frameworks Grounding This Study

2.5.1 Human-Centered, Contextual, and Decolonial AI

In the context of the Africa and Middle East region, the development of artificial intelligence must adopt a holistic, socially engaged approach that is both Human-Centered and Decolonial.

This merged framework mandates that AI systems must not only support people's goals, abilities, and creative processes, but must also fundamentally challenge the power structures and knowledge hierarchies that perpetuate global inequality.

A. Augmentation over Automation and Extraction

AI systems should be designed to augment human capabilities and support local creative or professional processes, as emphasized by Human-Centered Artificial Intelligence (HCAI) scholars like Shneiderman (2020) [22] and the concept of "Cognitive Orthoses" (Ford et al., 2015) [23]. However, this must be critically paired with a decolonial stance that guards against resource exploitation and digital extractivism, mechanisms identified as manifestations of coloniality in AI by Mohamed, Png, and Isaac (2020) [24].

B. Epistemic Values: Contextual and Relational AI Rooted in Ubuntu

While Human-Centered AI (HCAI) emphasizes that tools must fit regional realities and context-sensitive design, this framework pushes that imperative deeper by grounding AI ethics in specific, local epistemologies. For the Africa and Middle East region, this requires moving beyond a universalizing ethics and actively integrating contextual and relational values. The African philosophical concept of Ubuntu [25], which emphasizes "a person is a person through other persons," communal well-being, and social harmony, serves as a powerful ethical model. Applied to AI design, Ubuntu ethics value interdependence over individualism and collective flourishing over market efficiency. Integrating such localized, relational values ensures that AI systems strengthen, rather than erode, diverse cultural and social fabrics, thereby countering the structural harms of cultural dispossession identified by Decolonial AI scholarship.

C. Structural Accountability and Design Feedback

User accounts of breakdowns and unexpected uses (HCAI's "design feedback") must be read not merely as individual anecdotes, but as evidence of structural harms rooted in coloniality, such as algorithmic oppression and biased technical design. This reframing mandates that the governance of AI must prioritize justice, equity, and the empowerment of historically marginalized communities, granting them the authority to decide and build their own dignified socio-technical futures.

2.5.2 Cultural Sustainability and Digital Practice

Cultural sustainability here refers to the capacity of artistic communities to maintain and evolve their practices over time, in ways that preserve depth of knowledge while allowing for innovation. AI can support this goal when it helps document fragile archives, enables new forms of transmission, or opens up experimental formats that resonate with local audiences. It can undermine it when it introduces dependencies that cannot be maintained or when it sidelines existing skills without offering viable alternatives.

This lens encourages attention to questions such as continuity, transmission, and the durability of projects beyond a single festival or program. It also highlights the role of institutions in providing long-term support structures, from training and equipment to networks and spaces for reflection.

2.5.3 Data, Aesthetics, and Evaluation of Creativity

AI systems are built from data, and their outputs often reproduce patterns learned from large collections of images, sounds, texts, or movements. For artists in Africa and the Middle East, this raises aesthetic and methodological questions rooted in Decolonial AI and Cultural Sustainability.

How do datasets influence the look and feel of generated material?

If training data overwhelmingly reflects global north aesthetic paradigms, AI outputs risk algorithmic oppression and cultural dispossession by marginalizing or misrepresenting local, diverse art histories and forms. Research confirms that general-purpose AI models often exhibit cultural representation bias against African art (Cervantes & Alahmad, 2024) [26].

This necessitates a focus on building and leveraging contextual, decolonial datasets rooted in specific regional traditions, archival materials, and local epistemologies, such as the African philosophical concept of Ubuntu [25], to ensure generated aesthetics are culturally relevant and authentic.

How do curators, juries, and audiences evaluate works that involve both human and algorithmic contributions?

The evaluation process must be approached with Structural Accountability. Criteria for creativity cannot rely solely on Western concepts of originality or market value, which can introduce coloniality into valuation (Mohamed, Png, & Isaac, 2020) [24]. Instead, evaluation must privilege the extent to which the work supports cultural sustainability, a shift advocated by frameworks like Creative Data Justice (Arora P., 2024) [27], that is, how the AI augments local creative processes, ensures the transmission of traditional knowledge, or preserves the depth of knowledge within the artistic community, rather than undermining existing skills or creating unsustainable technological dependencies.

How do artists develop strategies for making these processes visible, legible, or open to critique?

Artists must adopt a stance of Augmentation over Automation and Extraction. The creative process must be made legible by treating the data and models as critical materials. Projects that visualize training sets, expose algorithmic biases, or use AI to reconfigure local archives provide crucial insight into how creativity is being redefined. These strategies empower historically marginalized communities with the authority to decide and build their own dignified socio-technical futures, ensuring the technology is not merely a mechanism of digital extractivism.

Taken together, these frameworks shift the focus from merely generating novel forms to ensuring that the practice, infrastructure, and institutional responsibility associated with AI art actively support the equity, justice, and cultural continuity of creative communities in the Africa and Middle East region.

3. Digital Infrastructure, Access, and Tools

This section maps the material conditions that determine whether artists and cultural organisations can meaningfully engage AI in practice. Connectivity, bandwidth, electricity reliability, access to tools and platforms, and access to skills are not background variables. They shape what kinds of projects are feasible, how long experimentation takes, and who can participate.

3.1 Digital Infrastructure and Access

AI systems rely fundamentally on stable connectivity, sufficient bandwidth, and reliable electricity. The presence of these elements varies significantly across the region. Large cities frequently offer reasonable mobile coverage, expanding fiber networks, and a growing number of coworking and innovation spaces. Conversely, smaller cities and rural areas often contend with slower connections, inconsistent service, and higher relative prices for data. For artistic work, these disparities are far from abstract. A visual artist experimenting with generative image models must upload and download massive files, update software, and sometimes interact with cloud-based interfaces for prolonged periods. Musicians utilizing AI-enabled plugins or cloud mastering services require uninterrupted sessions. Curators and producers managing archives, streaming, or remote collaborations need storage and transfer capacities that exceed typical personal use. When networks are slow or unstable, these creative workflows become difficult or fragmented.

Electricity reliability has equally profound effects. Power cuts interrupt resource-intensive activities such as rendering, model training, and recording. They also escalate the risk of data loss and hardware damage. Even brief outages inject uncertainty into planning and scheduling. Artists may choose to avoid complex computational workflows entirely because they cannot guarantee that equipment will remain powered long enough for their experiments to finish.

For instance, in places like Lebanon, prolonged and unpredictable electricity cuts have become a part of daily life. This instability severely hurts creative businesses that want to engage with digital and AI-backed platforms. The problem is so deeply ingrained that it has become an artistic subject itself, as seen in works like "The Search for Power" [28] by artist Tania El Khoury and historian Ziad Abu-Rish.

These conditions establish the practical horizon for designing AI-related artistic projects. Tunisia exemplifies many of these regional patterns; while connectivity in urban areas like Tunis is broadly sufficient for basic digital work, handling large AI models and media-heavy projects still demands careful timing and patience. Outside major centers, speeds and reliability vary significantly.

The landscape of AI tool accessibility in the region is highly fractured: while major hubs in the Gulf, such as Dubai, have world-class high-speed digital infrastructure that enables artists and studios to easily leverage demanding, cloud-based AI tools, many cities and vast rural areas across Africa face the opposite challenge, grappling with connectivity speeds and reliability too low to support crucial activities like real-time collaboration, large file transfers, or the sustained use of cutting-edge AI creative applications.

In Focus: Creative AI Workflows Hindered by Poor Connectivity

Generative AI for Visuals and Video

These are arguably the most demanding tools due to the sheer size of the data involved.

- **Image Generation Models:** While generating a small, low-resolution image can be fast, high-quality, high-resolution outputs require significant data to be downloaded. Slow internet makes the process of refining a prompt or exploring variations feel painfully slow, breaking the artist's creative flow.
- **AI Video Generation and Editing:** This is the most bandwidth-intensive task. Uploading original 4K or 8K video footage for AI processing requires gigabytes of high-speed upload capacity. Downloading the final, processed video is equally data-intensive.

AI Music Production and Cloud Mastering

The core issue here is not just file size, but the need for low latency and symmetrical upload/download speeds.

- **Cloud Mastering Services:** Professional music files are large. Uploading a single, uncompressed master track can be 50-100 MB, but an entire album's worth of stems can easily total tens or hundreds of gigabytes per project.
- **Real-Time Collaboration and Plugins:** Many advanced AI-enabled mixing and virtual studio plugins are cloud-integrated. They require a constant, low-latency connection to the cloud server to function. High latency makes real-time collaboration with remote producers impossible.

AI-Powered Remote Collaboration and Archiving

These workflows are more administrative but equally critical for professional studios.

- **Version Control and Archiving:** Studios use services to manage and back up multiple versions of large project files. Inconsistent connectivity and low bandwidth make reliable, automated backup difficult, leading to a high risk of losing work and causing delays in project hand-offs.
- **Remote Production Pipelines:** When a producer or artist needs to fetch a file from a cloud archive or a remote colleague's drive to start their part of the work, a slow connection blocks the entire pipeline, creating significant downtime and missed deadlines.

3.2 Access to Tools, Platforms, and Skills

Beyond infrastructure, artists need access to actual tools and to the knowledge required to use them. In high income environments, AI exploration often assumes personal laptops with recent processors, discrete graphics cards, and subscriptions to commercial services. In many parts of Africa and the Middle East, hardware is shared, older, or purchased second hand. Devices that can comfortably run current models or heavy creative software remain expensive.

Cloud based services partly offset this gap, but they introduce other frictions. Monthly subscription prices can be high relative to local incomes. Some platforms require international payment cards that not all artists possess. Licensing conditions are written in languages and legal frameworks that are not always easy to interpret. As a result, many practitioners rely on a small subset of free or trial tools and on informal exchanges of software among peers.

These practical constraints directly influence the form and scale of AI-driven art:

1. Lightweight, Browser-Based Tools & Free Tiers:

Artists actively avoid tools requiring powerful, expensive local hardware by prioritizing accessible, often free or low-cost, web-based platforms. For instance, artists like Hadeel Mohammed in Saudi Arabia [29] focus on generative AI image models accessed through a web browser. These platforms handle the heavy computation on the cloud, reducing the artist's hardware requirement to a standard laptop or smartphone and proving that profound conceptual art can be achieved using accessible, relatively "lightweight" text-to-image tools.

2. Focus on Cultural Context and Low-Data AI:

Artists deliberately choose projects where the AI is not about brute-force rendering but about cultural insight, which often requires less intensive, localized training data. For example, Yasmine Boudiaf's project [30] in Algeria uses localized data to generate patterns based on disappearing cultural markings and then overlays them via Augmented Reality (AR). This approach sidesteps the need for continuous access to large, internationally-trained models and instead prioritizes accessible output formats and localized data training.

Skill development follows similar contours. A number of training centers offer courses in AI, data science, and creative coding. Hackathons, labs, and short workshops introduce artists to basic concepts. Yet sustained learning pathways remain limited. For an artist who wants to integrate AI deeply into their practice, the path from curiosity to proficiency can involve a patchwork of online tutorials, peer support, and self-directed experimentation, often without institutional backing or access to mentors who understand both artistic and technical dimensions.

These patterns do not prevent AI experimentation, but they influence its form. Projects tend to remain relatively lightweight, favor tools that run in browsers or on modest hardware, and lean on collaboration between technically trained partners and artists who bring conceptual and aesthetic expertise.

3.3 What Counts as “AI” in This Report

In this report, “AI” includes both standalone AI tools and AI functionalities encountered indirectly through other creative systems. It therefore covers:

- Explicit AI tools used directly in creative work, including the generative image and video systems, and the AI music and cloud mastering services described in this section.
- Creative software and tools that embed AI functionalities, including editing, mastering, enhancement, and related features that are integrated into mainstream creative workflows.
- Platform-level AI that shapes the visibility and circulation of cultural content, including recommendation systems and automated moderation.

This scope reflects how artists and cultural organisations in the region often encounter AI. Not as a single discrete technology, but as a layered set of capabilities distributed across tools, platforms, and infrastructure.

4. Language and Artistic Expression

Language sits at the core of many artistic traditions in Africa and the Middle East. Poetry, song, theatre, storytelling, everyday speech, and even visual practices such as calligraphy depend on the nuanced use of words, rhythm, and script. The region is linguistically rich, incorporating Arabic in its many varieties, Amazigh languages, Swahili, and a wide range of African languages, which often coexist fluidly with French and English in artistic practice. In this report, language is treated as a central analytical pillar because it is simultaneously an artistic medium and the interface through which many AI systems are directed.

Because contemporary AI systems are fundamentally language technologies, their strengths and weaknesses in different languages directly influence what artists can do with them. However, most widely used AI models are trained primarily on English and a limited set of other languages. This creates a fundamental structural constraint for artists working in the region:

- **Uneven Support:** While support for Modern Standard Arabic has improved, quality varies significantly across dialects, genres, and tasks; many African languages remain underrepresented.
- **Creative Friction:** Where tools do offer support, performance for creative uses, such as poetry, subtle humor, or rhythmic wordplay, is often uneven, meaning artists must frequently adapt their ideas to English to get reliable results.

In practice, this means AI enters artistic processes through language as a tool, a collaborator, and a constraint. Prompts, scripts, and captions become part of composition. Unsupported dialects and scripts narrow what can be expressed and what can be steered.

This linguistic imbalance affects who can use AI comfortably and how fluently they can integrate it into their practice. This section looks at how current AI tools handle Arabic, regional dialects, and African languages, and what this means for future artistic work. The aim is not to offer a technical survey but to highlight practical implications for writers, performers, visual artists, and institutions. At the same time, grassroots initiatives like Masakhane [31] are actively pioneering Natural Language Processing (NLP) research by and for Africans to build essential, culturally relevant language resources.

The profound consequences of this linguistic inequality for artistic expression, cultural continuity, and community-driven work are explored later in this study.

4.1 Why Language Matters for AI Assisted Art

Even when artists work primarily with images or sound, they usually interact with AI systems through text. Prompts, parameter settings, and instructions tend to be written in a language the model understands well. If that language is English, then English becomes the bridge between the artist's idea and the model's response.

When artists think, dream, and compose in Arabic, Tamazight, Wolof, Swahili, Amharic, or Hausa, this creates a tension. They either translate their intentions into a language better supported by the system or accept that the model will sometimes misinterpret their words. Both paths have costs. Translation can dilute meaning and tone. Direct use of underrepresented languages can yield outputs that feel inaccurate or thin.

For art forms built on subtle shifts of register, humour, or allusion, these small losses accumulate. Over time, they can influence which languages artists choose for new work and how they imagine their audiences.

4.2 Arabic and its Dialects in AI Systems

Arabic occupies a special position. It is a major world language with deep literary and musical traditions, yet many AI models still perform best on Modern Standard Arabic and struggle with dialects. Tunisian Derja, Moroccan Darija, Algerian Dziriya, Levantine dialects, and Gulf varieties often appear in training data in fragmented or inconsistent ways.

For writers and performers, this uneven support has several consequences. Generating text in dialect may require extra editing. Song lyrics and spoken word pieces can lose their cadence. Scripts that combine several registers of Arabic, or mix Arabic with French, English, or Italian, may confuse models that expect a single dominant code.

In visual domains, calligraphy and text based design present their own challenges. Generative tools frequently misrender letters, combine incompatible scripts, or treat words as purely decorative shapes rather than legible language. Artists must then decide whether to correct these errors by hand, treat them as glitches with aesthetic value, or avoid text based generation altogether. Here, the model's misrendering can become an aesthetic material, even when it undermines legibility.

At the same time, new Arabic language models and tools continue to appear. Some focus on classical forms, others on modern usage or specific sectors such as education and customer service. For artists, the key question is how to access and adapt these tools for creative use, and how to combine them with general purpose systems in ways that suit their practice.

4.3 African Languages

Many artists in North Africa and across the continent work in languages that current AI models barely recognise. Tamazight languages and their Tifinagh script, for instance, remain under represented. So do numerous African languages that structure song, storytelling, theatre, and oral history in countries such as Senegal, Nigeria, Ethiopia, Kenya, Rwanda, and Tanzania.

When a language is largely absent from training data, AI tools cannot engage with it meaningfully. Prompts written in that language may produce incoherent results. Attempts to generate poetry, dialogue, or lyrics can fail outright. Visual motifs linked to those linguistic worlds may also be harder to express if the model has not seen them often.

For artists, this is not only a technical inconvenience. It shapes which parts of their cultural repertoire they can bring into AI supported work. A choreographer might use AI to prototype lighting designs but find that the system cannot handle voiceover in their preferred language. A writer may draft a story in one language, then switch to another when interacting with AI tools, creating an artificial divide between conception and execution.

Initiatives that build language resources from within the continent illustrate a different path. Community driven projects that collect, annotate, and maintain datasets for African languages show how linguistic diversity can be integrated into AI development rather than treated as an afterthought. When such efforts intersect with artistic practice, they create possibilities for new forms of multilingual and locally grounded work.

4.4 Creative Consequences of Linguistic Inequality

When some languages are well supported and others are not, patterns emerge that extend beyond the studio. Artists who speak multiple languages may gradually default to those that “work better” with AI tools, especially under time pressure. This can influence which audiences they imagine and which stories they choose to tell. Over years, the cumulative effect may be a gradual shift in the language of certain genres or formats.

There is also a risk that global AI platforms become de facto reference points for what counts as a “standard” version of a language. If models trained primarily on formal registers are used to generate dialogue, song lyrics, or commentary, they may push creative work toward more neutral or generic forms, leaving out regional colour and everyday speech.

For institutions, linguistic inequality influences programming decisions. Workshops that rely on AI tools may be easier to run in English or French, even when most participants are more comfortable in Arabic or a local language. This can inadvertently reproduce existing hierarchies in who feels addressed by, or able to contribute to, AI related conversations.

4.5 Directions for Institutions and Networks

Addressing these imbalances does not require a technical laboratory, but it does require intention. Cultural organisations can play several roles that sit well within their existing capacities. They can document how artists in their networks actually use language in AI workflows and share that knowledge publicly. They can invite technologists to co design tools and interfaces that accommodate multilingual prompts, mixed scripts, and transliteration practices familiar in the region.

They can also host small, focused experiments in which artists work with language models built specifically for Arabic or for African languages and reflect on the differences in output, comfort, and creative direction. Such experiments do not solve the global problem of linguistic inequality, yet they produce practical insight that can guide more ambitious collaborations later.

For L'Art Rue, language sensitive work with AI aligns naturally with its history of neighbourhood based projects and its attention to the textures of everyday speech in Tunis. A future programme on AI and the arts could, for example, centre Derja or other regional varieties in its workshops, treat translation as a creative practice rather than a logistical step, and commission works that explore what happens when AI is asked to listen to languages it barely knows.

By treating language as a structural element of AI engagement rather than a secondary detail, institutions help safeguard the conditions under which artistic expression in the region can continue to grow on its own terms.

5. Artistic Practice, Labor, and Economic Impacts

Building on the preceding sections on infrastructure, access, and language, this section examines how AI intersects with artistic practice as both creative risk and economic pressure. It focuses on how material constraints shape what artists can make, how labor markets shift around AI-generated outputs, and what conditions determine whether AI-related experimentation can be sustained over time.

5.1. AI in Artistic Workflows and Creative Risk

This section explains the practical constraints of physical infrastructure with the financial hurdles that limit AI engagement for artists across Africa and the Middle East.

Computational Infrastructure and Resource Scarcity

Working with large AI models requires significant computing power and reliable network connections. In many parts of Africa and the Middle East, these resources are centralized in a limited number of universities, technology companies, and data centers. Independent artists and small cultural organizations typically rely on standard or shared devices like laptops, computers, or mobile devices.

This scarcity dictates the scope of artistic projects. Tasks like training custom AI models on local archives, running interactive installations, or working extensively with high-resolution video outputs are often beyond reach without external technical partners. Even when using cloud-based tools (where computation is handled remotely), sustained work depends on stable bandwidth, which is not guaranteed everywhere.

The result is a tiered landscape where only a few institutions and collectives with access to stronger infrastructure can pursue ambitious AI projects, while many others are limited to lighter uses due to a lack of available capacity.

Economic Barriers and the Cost of Creative Experimentation

Economic constraints form the second major structural barrier. AI-capable hardware, such as laptops with dedicated graphics processors, is expensive relative to average incomes in many countries in the region. Prices are often further inflated by import duties, currency fluctuations, and limited local supply.

Beyond hardware, software and services introduce recurring costs. Subscription-based creative suites and model hosting platforms often charge in foreign currencies via international payment systems. For artists earning in local currencies, these fees can be substantial and unpredictable. While free or “freemium” tools exist, they often come with usage caps, watermarks, or restrictions unsuitable for professional work.

These financial factors make sustained AI experimentation difficult. Artists may only purchase access for a short period to complete a specific project before dropping the tools due to high fees. Institutions seeking to host AI-related residencies must budget for infrastructure and licenses on top of core operational costs.

Linguistic & Representational Erasure

The aesthetic and linguistic output of AI models is heavily determined by their training data, which is overwhelmingly sourced from the Global North. This structural imbalance creates a profound risk of algorithmic cultural erasure for artists in Africa and the Middle East, threatening to flatten local specificities into a generic global style.

Data Voids and Aesthetic Homogenization

AI tools are designed to align with the dominant patterns in their training data, leading them to gravitate toward Western-centric aesthetics. Visual and sonic languages from the Global South are frequently represented in “data voids”.

- **Failure to Capture Local Texture:** When models are trained primarily on Western art history and commercial stock imagery, they struggle to accurately render specific regional textures, such as North African Zellij tiling, West African textile draping, or the tonal nuances of traditional instruments like the kora or oud.
- **Flattening of Style:** The exclusion of “low-resource” languages and cultural datasets leads to AI systems that fail to “see” or “speak” African contexts [31]. Consequently, artists often find their work is flattened into a “global generic” style, stripping away the hyper-local specificity that defines regional art.

Linguistic and Scriptural Marginalization

This erasure is compounded by the dominance of English and Latin-script languages in global AI models.

- **Algorithmic Gatekeeping:** The scarcity of non-English data means that creative workflows [39] become dependent on English prompts, even when the artistic intention is grounded in non-English traditions. This requires artists to “translate themselves” into a linguistic system that does not reflect their artistic worlds.
- **Script Failure:** Generative models frequently fail to render non-Latin scripts correctly, often turning Arabic calligraphy or Tifinagh (Amazigh) symbols into illegible “hallucinations”. The exclusion of African languages [36] constitutes a form of digital neglect, barring millions of speakers from participating in the creative digital economy in their native tongues. This structural barrier privileges English as the default language of digital creativity.

Disruption of Knowledge Transmission and Cultural Hijacking

The reliance on AI introduces risks to the integrity of cultural memory and the transmission of embodied knowledge.

- **Loss of Craft:** Traditional arts rely on the slow, intergenerational transfer of skills from master to apprentice, conveying technique, cultural philosophy, and community history. Scholars warn that if younger practitioners turn to AI for immediate results (e.g., generating a textile pattern in seconds), the “chain of transmission” may break [10]. This risks the final image surviving while the embodied knowledge and supporting social fabric disappear.
- **Cultural Hijacking:** This structural distortion also manifests as cultural hijacking. The Umm Kulthum [37] controversy in Egypt, for example, demonstrates how generative AI can reanimate cultural icons without consent, destabilizing artistic lineage and raising fears of “banalization” when models generate work in the voice of deceased artists.

Recent experiments in Ethiopia show how musicians are using AI to counter sonic erasure by building new archives rather than merely consuming global ones. Ethiopian artist Dawit Ketema (Mashela) [38] combines traditional instruments like the washint with machine-learning systems to create an “AI-powered cultural sound archive.” These models analyze and reinterpret historic Ethiopian soundscapes, enabling new compositions while preserving fragile musical traditions. Such work demonstrates how carefully designed AI tools can reinforce cultural memory rather than flatten it into generic global styles.

5.2. Economic Precarity and Shifts in Cultural Labor

For artists across Africa and the Middle East, livelihoods are already precarious, and AI introduces a new layer of uncertainty into cultural economies characterized by irregular income and limited institutional funding. This uncertainty manifests in two key ways: downward pressure on fees due to market competition and an extractive dynamic around creative labor and data.

Downward Pressure on Fees and Labor Displacement

- **Competition from Cheap Outputs:** Cheap, instantly generated media, such as images, logos, background music, and promotional videos, now directly compete with services that once required human artistic labor. Small clients and cultural businesses with tight budgets are often tempted to replace paid creative work with AI outputs.
- **Thinning the Professional Ladder:** This shift particularly affects entry points into the creative economy. Early career artists in the region often rely on low-paid, repetitive assignments, like poster design or basic video edits, which form the “first rung” of the professional ladder. As AI systems automate this repetitive work, the base of the industry becomes thinner. OpenAI’s former CTO Mira Murati conceded that while AI extends human creativity, “some creative jobs maybe will go away,” [32] with repetitive tasks, those young artists in the Global South rely on to survive, being the first to be displaced.
- **The Cost of Integration:** Even when artists integrate AI, expectations around labor change. Artists shoulder the costs of learning, experimenting with, and maintaining AI tools, often paying for dollar-based subscriptions while earning in local currencies. Despite this added technical burden, market fees often do not rise, absorbing AI efficiency as a new normal and eroding the time and care that once justified creative pricing.

5.3 Extraction, Data, and Invisible Labor

AI systems rely on content scraped from artists' work, creating a structural tension that feeds instability:

- **Uncompensated Data Scraping:** Visual styles, oral traditions, local dialects, and region-specific aesthetics are often scraped into global training datasets without the creators' consent or attribution. This forms an extractive dynamic where creators pay to use tools partially trained on cultural materials taken from them. Mechanisms for consent, compensation, and data governance remain unresolved and technically difficult to implement.
- **Labor Paradox:** This dynamic runs deeper due to the reliance of AI on invisible labor. The African Content Moderators Union [33] and the Data Labelers Association [34] exist because AI systems depend on underpaid labor largely performed by workers in Kenya, Uganda, and other parts of the continent. These same workers help train the systems that may later displace members of their own artistic communities, creating a structural tension where exploited labor fuels technologies that destabilize local creative economies.

These economic shifts reorganize the professional landscape, sharply increasing pressure on artists. Artists must now navigate a future where they choose whether to resist AI entirely, integrate it selectively, or reposition themselves toward hybrid forms of production, with each path carrying significant financial risk in an already fragile ecosystem.

5.4. Sustainability of Artistic Trajectories

The lack of specialized training, institutional readiness, and flexible funding mechanisms acts as a core structural barrier to sustained AI engagement in the arts.

Skills, Training, and Technical Support

AI work often requires skills at the intersection of several domains: coding, machine learning, design, and dramaturgy. Very few people possess deep expertise across all these areas; successful projects emerge from teams that combine complementary skills.

- **Limited Competence Development:** Opportunities to develop this mixture of competences are limited in the region. Art schools may offer little exposure to AI and data-driven methods, while computer science departments may not engage closely with contemporary art.

- **Coordination Problem:** Artists who wish to work with AI need access to technically fluent collaborators, mentors, and support structures that understand artistic goals. Cultural institutions could serve as connectors, but they must first build their internal understanding. Without this ecosystem of shared knowledge, AI remains intimidating or inaccessible for many practitioners.

Institutional Capacity and Organisational Processes

Cultural organizations, which often operate under resource constraints and juggle multiple responsibilities, face operational hurdles when introducing AI:

Need for New Frameworks: Institutions need time and often unavailable expertise to develop policies for data handling, guidelines for responsible experimentation, and procedures for assessing the impact of AI-enabled projects, ensuring AI aligns with their missions and affects staff workload responsibly.

Funding Misalignment: Many funding structures do not recognize AI and digital experimentation as distinct lines of work. Project proposals must fit existing categories that may not reflect the hybrid nature of AI-driven initiatives, which can discourage organizations from investing in long-term AI strategies.

Time, Funding, and Project Cycles

Artistic experimentation with AI requires time for exploration, error, and iteration, but standard project cycles prioritize visible outputs within short timeframes.

- **Pressure for Quick Results:** Festivals and grant programs typically fund works with fixed completion dates, giving artists limited room to integrate AI gradually into their practice. Institutions also face pressure to demonstrate results quickly, which pushes them toward high-visibility projects rather than slower, foundational work.
- **Uneven Funding Landscape:** While Gulf states invest hundreds of millions into AI art infrastructure, independent artists and institutions in North Africa and sub-Saharan Africa operate with minimal funding [40]. Cultural funders like AFAC and Mophradat rarely support AI-specific experimentation [41]. The S+T+ARTS Afropean Intelligence Programme provides exceptions, but its scale is too small relative to regional need [42].
- **Risk of Isolated Experiments:** This creates an uneven landscape, masking the structural absence of accessible, community-based funding for critical or experimental AI arts work.

Without longer-term support and flexible funding, AI in the arts risks remaining a series of isolated experiments rather than a sustained, reflective practice

6. Authorship, Rights, and Legal Developments

This section addresses how AI-assisted creation unsettles authorship, attribution, and consent, and how legal norms remain in flux across the region. These issues matter both for individual creators and for cultural institutions working with communities, archives, and public-facing programming.

6.1 Challenges to Authorship and Artistic Control

AI tools fundamentally unsettle established understandings of authorship, attribution, and consent, creating a legal and ethical vacuum that is particularly acute in the Africa and Middle East region where intellectual property (IP) protections are often uneven. This disruption introduces risks related to creative integrity, attribution, and the core social relationships of community-based practice.

Generative systems, trained on vast and often unvetted datasets, produce outputs that can closely resemble existing styles, motifs, or voices. This leads to three non-economic risks to artistic identity:

- **Loss of Artistic Control and Voice:** Creators risk having their unique body of work, stylistic development, and cultural knowledge passively incorporated into global training data without their consent, compensation, or awareness. This ethical injury makes it difficult for them to control the narrative or evolution of their own artistic voice when a derivative work can be instantly generated by an algorithm.
- **The Identity of the Maker:** Artists who integrate AI face complex questions of credit when a piece blends hand-drawn elements, local recordings, or filmed material with algorithmically generated segments. The challenge is to formally acknowledge the role of the machine and the uncredited labor that trained it in the authorship claim. This issue is magnified in traditional art forms where the integrity of the maker's hand is central to value. For instance, Egyptian novelist Ahmad Lutfi [35] chose to present the "raw machine-generated text as is" for his AI-assisted novel "A Treason in Morocco", underscoring the author's role in deliberate attribution.
- **Unclear Credit:** Without clear norms, artists may find their contribution undervalued or misunderstood, especially if automated elements are perceived as doing the "real" work.

6.2 Fragility of Community Trust and Consent

In socially engaged and participatory art, relationships are often as important as the finished works, and projects unfold through conversations and shared tasks. Introducing AI changes this dynamic:

Paramountcy of Consent: When artists experiment with AI using images, recordings, or stories drawn from participants or local/indigenous knowledge systems, they must ensure collaborators fully understand how their contributions may be transformed, stored, or re-used. The ethical and legal vacuum means that the use of communal stories, images, and voices risks becoming a betrayal of trust [32].

Managing Unease: Community members may feel proud to see themselves represented in new ways, but they may also feel uneasy if they do not understand how the images were produced or what will happen to the underlying data. For a sound piece using synthesized voices blended from multiple people, questions of who has the right to approve or reject the result can arise.

Erosion of Embodied Practice: There is a risk that technologically mediated work shifts attention away from physical presence and collective making, potentially tilting projects toward screens and software at the expense of the embodied, local engagement that defines community art.

Human Oversight: The UNESCO Recommendation on the Ethics of Artificial Intelligence [2] emphasizes the core principle of Human Oversight and Determination, asserting that AI systems must not displace ultimate human responsibility. This principle is continually challenged when artists must navigate opaque co-authorship claims and complex consent requirements for materials sourced from local knowledge systems.

6.3 Unclear Norms and Evolving Legal Frameworks

Norms and regulations around AI in creative fields remain in flux, adding significant uncertainty for artists and institutions across the region.

- **Unresolved Legal Questions:** Questions about copyright, data protection, and the use of personal likeness in generated content do not yet have consistent answers across the region.
- **Navigating Uncertainty:** While some countries, such as Saudi Arabia, have published "Guidelines on Copyright Principles for AI-Related Works" [43], artists and institutions must navigate this uncertainty while planning their projects [44].
- **Risk of Inaction:** Overly cautious attitudes may limit innovation and learning, while uncritical adoption can expose practitioners to disputes or reputational damage. This uncertainty remains a significant barrier to confident engagement with AI [45].
- **Need for Dialogue:** For cultural organizations that wish to act responsibly, this creates a need for shared discussion spaces where artists, legal experts, technologists, and funders can exchange views.

6.4 Implications for Artistic and Institutional Practice

Taken together, authorship ambiguity, consent fragility, and evolving legal norms shape everyday creative choices about tools, collaboration, and public presentation. They also influence institutional decisions about commissioning, hosting, archiving, and supporting AI-assisted work. The next section maps grassroots practices and emerging artistic infrastructures that are already responding to these uncertainties through experimentation, peer learning, and locally grounded initiatives.

7. Grassroots Practices and Emerging Artistic Infrastructures

Across Africa and the Middle East, a constellation of grassroots initiatives, artistic experiments, community-driven movements, and emerging institutions are shaping culturally grounded responses to artificial intelligence. These efforts challenge the narrative that AI development is the exclusive domain of Silicon Valley, multinational corporations, or ambitious state-backed digital transformation initiatives in the Gulf. Instead, they reveal a region engaged in active worldmaking: resisting extractive technologies, building local alternatives, and embedding AI within collective histories, languages, and creative traditions. The cases below show AI entering practice as composition, dramaturgy, sound, archive, and simulation, rather than only as infrastructure or governance.

7.1 Regional Artistic and Community-Led Initiatives

Some of the most substantive responses to AI in the region originate not from major institutions but from artist collectives, research labs, and local governments. They represent attempts to reclaim technological agency and challenge the global hierarchies that shape AI's development.

Masakhane and the Politics of Language Sovereignty

Masakhane, meaning “We Build Together” in isiZulu, is the continent’s most influential grassroots AI movement. Masakhane Research Foundation (MRF) is a non-profit that spans dozens of African countries. Its mission is explicit: develop NLP systems for African languages “by Africans, for Africans.” Masakhane advances a radically different theory of AI development. Rather than waiting for Big Tech to extend partial, flawed support for African languages, Masakhane insists that African researchers and communities must build their own models, datasets, and research institutions.

Its newly announced fund to support African creators of AI models signals an unprecedented shift: the reclaiming of African linguistic futures from extractive Western systems. For artists, this matters profoundly. The availability of functioning models for Hausa, Swahili, Amharic, Ewe, Kinyarwanda, Wolof, Yoruba, and others directly shapes which stories can be told, which poetics can be generated, and which cultural forms can survive the digital transition.

<https://www.masakhane.io/>

KorinAI (Nigeria) and the Rise of Regional Creative Platforms

KorinAI's African-focused music-generation platform, priced at \$10 per month for the creation of 100–130 songs, illustrates emerging business models for culturally specific AI creative tools. Unlike global systems optimized for Western genres, KorinAI is designed to reflect African sonic structures, percussive styles, and linguistic rhythms. It demonstrates that African cultural specificity can drive viable technological innovation rather than hinder it.

<https://www.usekorinai.com/>

S+T+ARTS Afropean Intelligence Residencies Program

A multi country residency network supporting African artists to develop projects that explicitly experiment with artificial intelligence and digital tools, with host institutions across several African cities and a stated critical posture toward inherited AI paradigms.

<https://starts.eu/detail/afropean-intelligence-residencies-program/>

Fak'ugesi African Digital Innovation Festival

A long running digital creativity festival that explicitly positions AI and immersive experiences inside its core festival proposition, blending exhibitions, talks, and practice oriented activities.

<https://fakugesi.co.za/>

Africa AI Creativity Week and Awards

Africa AI Creativity Week and Awards (Marrakech, Morocco, staged during GITEX Africa). A creative AI focused festival and awards format aimed at showcasing AI and hybrid works within the broader technology event context of GITEX Africa, positioning itself at the intersection of culture, technology, and business.

<https://filmfreeway.com/AfricaAICreativityWeek>

IndabaX South Africa - AI Fest

AI Fest format with explicit arts programming in the event design (Stellenbosch, South Africa). Primarily an AI community convening, but it deliberately incorporates art and music as part of the public facing festival layer, which can matter if you are tracking crossovers between research communities and creative practice.

<https://indabax.co.za/register/ai-fest/>

Beyond the Algorithm (University of Witwatersrand)

The University of Witwatersrand's "Beyond the Algorithm: African Musical Creativity in the Age of AI" initiative, led by Dawit Ketema (Mashela), extends this experimentation into research. Ketema asserts, "AI is not replacing artistry, it's becoming a new instrument. We can use it to keep our traditions alive while creating something future-facing." This ethos, balancing preservation with innovation, captures the spirit of many regional AI-art efforts.

<https://www.wits.ac.za/aiam/>

Mohamed bin Zayed University of Artificial Intelligence - AI x Arts Fellowship

MBZUAI The Academy, AI x Arts Fellowship (Abu Dhabi, United Arab Emirates). A structured fellowship that brings artists into residency formats designed to work alongside AI researchers, with museum and cultural platform immersion in Abu Dhabi. It is framed as a bridge between science and the humanities, not a marketing add on.

<https://mbzuai.ac.ae/news/mohamed-bin-zayed-university-of-artificial-intelligence-launches-the-academy-and-worlds-first-ai-x-arts-fellowship/>

Art Dubai

Art Dubai: A curated fair section launched to explore new media art and technology, with the 2025 framing explicitly examining how artists use artificial intelligence alongside immersive tools to address environmental, social, and political questions.

Art Dubai Global Art Forum: An annual summit positioned by Art Dubai as the largest arts conference in the Middle East and Africa, with programme language that explicitly includes artificial intelligence as a core topic within sessions on how the creative industries are being reshaped

<https://www.artdubai.ae/>

Institute for Worldmaking: Arab-Led AI and Cultural Archives

The MIT Institute for Worldmaking brings an Arab-led vision to AI development. Its work integrates ancestral knowledge, speculative fiction, and cultural archives into computational systems, explicitly resisting mainstream AI's erasure of Arab identities, languages, and histories. By centering epistemologies that Western AI frameworks overlook, it aligns closely with decolonial approaches advocated by artists like Ameera Kawash, who argues that ethically grounded AI must incorporate embodied, ephemeral, and community-held knowledge forms. The Institute demonstrates that AI development grounded in Arab cultural traditions is both possible and necessary.

<https://www.instituteforworldmaking.org/>

Earshot by Lawrence Abu Hamdan

During Dream City 2025, the artist Lawrence Abu Hamdan presented Zifzafa, a performance that sits at the intersection of sound art, testimony, and computational simulation. The title invokes an Arabic word describing a wind that shakes everything in its path, and the work takes place in the contested landscape of the occupied Golan Heights, where the installation of massive wind turbines threatens to transform the acoustic environment of entire communities. In this performance, speech, soundscape, and real-time simulation merge to evoke an impending storm: not only the literal wind, but the political, sensory, and environmental turbulence generated by industrial infrastructure.

Zifzafa frames the wind as an active witness. It carries songs, cries, and memories—fragments of lived experience that risk being erased by the overwhelming noise of giant turbines. Composed by Busher Kanj Abu Saleh and performed with Amr Mdah, the work treats air as an archive and the sonic environment as a record of resistance. Abu Hamdan holds a microphone toward the invisible, asking how noise, silence, and simulation interact to shape what can be heard and what can be known.

In this context, simulation is not deployed as a tool of prediction or technical mastery but as a mode of situated witnessing. It exposes how new infrastructures overwrite older modes of coexistence with land, sound, and weather. Zifzafa extends the core argument of this report: that artistic engagements with AI, sensing technologies, and real-time modeling are not merely aesthetic experiments. They are diagnostic acts that reveal how technological systems reorganize perception, memory, and the politics of place.

<https://earshot.ngo/>

Cairotronica: New Media Art and Technological Critique

Cairotronica is a prominent biennial festival dedicated to new media and electronic arts in Egypt. Founded to foster dialogue between art, science, and technology, it provides a vital platform for artists from Egypt and the wider Arab region to engage critically with digital tools, including AI, robotics, and interactive installations. By hosting workshops, exhibitions, and educational programs, Cairotronica actively cultivates the technical literacy and critical distance necessary for artists to approach complex technologies on their own terms, rather than simply as consumers of finished tools. It exemplifies a regional, artist-driven effort to build community around technological experimentation and critique, serving as a significant counterpoint to state- or industry-led AI initiatives.

<https://www.cairotronica.com/>

TACIR - Immersive Digital Practices and AI Literacy

Another node in the emerging digital arts ecosystem is TACIR, a programme created and managed by AMAVI, the Association du Multimédia et de l'Audiovisuel. TACIR focuses on immersive and interactive artistic practices that draw heavily on digital media, and its home base inside L'Art Rue's headquarters gives it an unusually strong anchor in Tunis's cultural infrastructure. TACIR hosted recently an Artificial Intelligence workshop that offered participants a structured introduction to AI principles, creative applications, and potential uses within the Cultural and Creative Industries.

TACIR's partnership with L'Art Rue illustrates how contemporary cultural institutions evolve in tandem with technological shifts. L'Art Rue provides the grounded social infrastructure, while TACIR brings technical experimentality and a readiness to explore digital sensibilities.

Together, they exemplify a broader movement in Tunisian cultural ecosystems: an interdependent model in which technology does not replace artistic practice but becomes part of its grammar, enabling new forms of immersion, participation, and creative inquiry.

The MENA Observatory on Responsible AI

The MENA Observatory on Responsible AI is an interdisciplinary regional platform dedicated to advancing responsible data and artificial intelligence practices across the Middle East and North Africa. It brings together policy researchers, innovators, civil society actors, entrepreneurs, educators, and public institutions to strengthen local capacity and shape inclusive AI governance. The Observatory seeks to inform and monitor policy processes related to AI for development, while promoting a grounded approach that reflects lived realities, community engagement, and regional diversity. By creating collaborative spaces for dialogue and exchange, it connects stakeholders who might otherwise operate in isolation and works to elevate MENA voices, values, and standards in global conversations on AI governance. Its vision is to serve as a locally driven hub for knowledge, coordination, and policy influence, positioning responsible AI not as an imported framework, but as a practice rooted in the social, cultural, and developmental priorities of the region.

<https://menaobservatory.ai/>

7.2 AI Cinema and Film Festivals in Africa

The most visible intersections of AI and the moving image in Africa often appear not in research labs or Silicon Valley studios, but in festivals and community-led programs that treat cinema as both an artistic practice and a social technology.

The International Video Art Festival (FIAV) in Casablanca (composition) has a long history of promoting digital arts in Morocco, using its platform to bridge cultural and scientific influence. Recent editions, such as the 31st edition with the theme “Disembodied Identities,” have featured performances blending magic and digital arts, and included international conferences and workshops that discuss the intersection of art, literature, and technology, including AI. The festival actively promotes contemporary digital creation and serves as a key space for training and exchange for Moroccan youth.

In West Africa, the Naija Artificial Intelligence Film Festival (NAIFF) in Lagos (composition, dramaturgy) represents a more recent but highly significant development. Founded in 2025 by Obinna Okerekeocha, NAIFF positions itself as the continent's first festival dedicated specifically to AI cinema. Its inaugural edition, held at Lagos's Alliance Française, attracted nearly five hundred submissions from across Africa, with films that use AI tools to experiment with narrative, visual style, and genre. Around the festival, a WhatsApp community of more than three hundred members, self-described "promptasians," has emerged as an informal laboratory where filmmakers exchange prompts, techniques, and critiques. Through initiatives such as AI_CADEMY, NAIFF also invites industry professionals to teach ethical and technical aspects of AI art, turning the festival into both a showcase and a school. The debates surrounding NAIFF mirror broader tensions in Nigerian and African film industries: AI can lower production costs and enable ambitious visual worlds on minimal budgets, but it also threatens to displace existing crafts and to import aesthetic biases from models trained on Western-centric datasets. Whether AI cinema strengthens or dilutes Nollywood and other African film traditions will depend on how deliberately festivals like NAIFF center local languages, histories, and visual cultures in their curation and pedagogy.

These African initiatives unfold in parallel with an expanding constellation of international AI film festivals that operate with far greater resources, visibility, and technical infrastructure. The AI International Film Festival (composition), launched in Hollywood in 2021 as an independent, non-profit festival, has positioned itself as a kind of "Academy Awards for AI films," hosting monthly or recurring showcases of AI-generated and hybrid works. Runway's AI Film Festival (composition), established in 2022 and now in its third edition, curates a small number of finalists for gala screenings in cities such as New York and Los Angeles, presenting itself as a window into a new creative era in which filmmakers wield generative tools alongside traditional cinematography. Other platforms, such as the AI for Good Film Festival (dramaturgy), explicitly frame AI cinema as part of a broader agenda of using technology to address global challenges, inviting films that combine AI-augmented production techniques with narratives about social impact. OMNI (composition), an international biannual festival created in 2024, focuses on generative and AI-powered video and aims to surface high-quality independent work from around the world, while the Global Metaverse AI Film Festival (GMAFF) (simulation) experiments with immersive, participatory formats that blur the line between cinema, interactive media, and virtual environments.

Taken together, these festivals show how AI cinema is being institutionalized unevenly across the globe. In Hollywood and major Western cities, AI film festivals often benefit from established funding networks, access to cutting-edge infrastructure, and proximity to both the tech and entertainment industries. In Africa, by contrast, initiatives like Cairotronica and NAIFF operate under far tighter constraints, but they are also closer to the communities whose stories are at stake. Their curatorial decisions implicitly answer questions that international festivals sometimes treat as secondary: how to prevent AI-generated films from reproducing Western visual templates; how to ensure that AI tools expand rather than erase local film languages; how to share skills and infrastructure in ways that do not simply create new hierarchies between “AI-native” creators and everyone else. For this report, AI cinema in Africa functions as a barometer of broader dynamics: it reveals both the democratizing potential of AI tools and the risk that, without deliberate cultural strategy and institutional support, African artists and filmmakers will once again be positioned primarily as content providers or aesthetic sources for systems built and governed elsewhere.

Across these examples, AI appears less as a distant infrastructure than as a set of situated artistic functions: shaping composition, sound, archives, simulation, and dramaturgy. The next section maps the funding and organizational ecosystems that influence whether such experiments remain isolated or become sustained practice.

In Focus: LILY and the million dollar signal from Dubai

In January 2026, Tunisian filmmaker Zoubeir Jlassi won a one million dollar prize for the nine minute short film LILY at the fourth edition of the 1 Billion Followers Summit in Dubai. The award was presented by Her Highness Sheikha Latifa bint Mohammed bin Rashid Al Maktoum, Chairperson of the Dubai Culture and Arts Authority, in a summit framed around “Content for Good”.

Run in collaboration with Google Gemini, the competition drew 3,500 submissions across 116 countries. It also set a rule that: films had to be at least 70 percent AI generated using Google tools, including Gemini, Veo, Flow, and Imagen. Other software was allowed only for supplemental editing, not for video generation.

LILY is narratively spare. In a rain soaked city, a lonely archivist commits a hit and run. A child’s doll becomes stuck to the front of his car and functions as a witness, pushing him toward confession and repair, ending with the doll returned to the injured child.

The story mirrors the prompt. Entrants chose between “Rewrite Tomorrow” and “The Secret Life of”. LILY takes the second theme literally, then turns it into moral pressure. The doll behaves like an audit log made physical: small, mute, stubbornly evidentiary.

For AI cinema in Africa and the Middle East, the win signals opportunity and tension at once. It shows permeability: a Tunisian creator can enter a global pool and win at a scale that local funding rarely matches. It also shows where gatekeeping is accumulating. The prize rests on a state backed convening platform partnered with a major technology provider, and the rules hard code dependence on one toolchain. Visibility starts to hinge on cloud access, model availability, subscriptions, and compliance regimes defined elsewhere.

For festivals beginning to formalise AI categories, LILY suggests three practical lessons:

- Treat disclosure as part of the artwork’s public contract, not backstage paperwork.
- Keep language plural, but demand legibility through subtitles adapted to local audiences.
- Curate for meaning, not spectacle, so AI work is judged as cinema, not as a software demo.

8. Funding Landscape and Organizational Ecosystem

The funding environment for AI and the arts across Africa and the Middle East remains profoundly fragmented. While the region has seen explosive state-led investments in AI infrastructure and digital culture, particularly in the Gulf, independent arts organizations, socially engaged cultural spaces, and community-based practitioners operate with minimal institutional support. This uneven ecosystem shapes who can experiment with AI, who cannot, and whose cultural futures are being written by external actors.

This section maps the current funding and institutional landscape with a focus on identifying gaps, opportunities, and stakeholders relevant to L’Art Rue’s future reflection and institutional conversations on AI and artistic practice.

8.1 Stakeholder Map: Roles and Relevance

The funding environment is divided between large, state-backed entities (driving infrastructure and prestige) and a limited number of independent foundations (supporting critical practice).

Organization	Type	Region	Focus	Initiatives
L’Art Rue	NGO	Tunisia / Europe / MENA / Africa	Socially engaged art, collective memory, community-based practices	Exploring digital strategies; operates ZAT digital magazine
AFAC	Funder	MENA	Multi-disciplinary arts funding	Emerging digital programs (Creative Labs)
Mophradat	Funder	MENA	Contemporary Arab arts; cross-disciplinary	“Future-facing” projects; computational art travel support

8.2 Regional Funding Landscape: By Country

The landscape reveals a polarity between the high capital Gulf states and the more heterogeneous funding ecosystems across North Africa, the Levant, and sub Saharan Africa.

Country/ Region	Primary Government Funders	Independent & Private Funders
UAE	Ministry of Culture and Youth, Dubai Culture & Arts Authority, ADMAF	Art Jameel, Sharjah Art Foundation, Alserkal Art Foundation, Corporate Sponsors
Saudi Arabia	Cultural Development Fund (CDF), Ministry of Culture, PIF	Painting & Patronage, Kinda Foundation, Deutsche Bank partnerships
Egypt	Ministry of Culture, Foreign Embassies (U.S., Netherlands), British Council	AFAC, Culture Resource, Mophradat, Sawiris Foundation, Ford Foundation
Tunisia	Ministry of Cultural Affairs	AFAC, Tfanen-Tunisie Créative (EU/British Council), Kamel Lazaar Foundation
Lebanon	Minimal (Post-crisis)	AFAC, Open Society Foundations (OSF), Calouste Gulbenkian Foundation, Andrew Mellon Foundation
Morocco	Ministry of Youth, Culture, and Communication	AFAC, Hiba Foundation (ASF'ART), TUI Care Foundation, Africa Art Lines
Nigeria	Federal Ministry of Art, Culture and the Creative Economy; National Council for Arts and Culture	MTN Foundation; MacArthur Foundation (Nigeria office); Goethe Institut Nigeria; British Council Nigeria (Arts); Access ART X Prize (Access Holdings)
South Africa	Department of Sport, Arts and Culture; National Arts Council; National Film and Video Foundation	Standard Bank arts sponsorships; Absa L'Atelier

Country/ Region	Primary Government Funders	Independent & Private Funders
Kenya	State Department for Culture, The Arts and Heritage; Kenya Film Commission	HEVA Fund; Safaricom Foundation; Goethe Institut Kenya; British Council Kenya (Arts)
Ghana	Ministry of Tourism, Culture and Creative Arts; National Commission on Culture; National Film Authority	MTN Ghana Foundation; Goethe Institut Ghana; British Council Ghana (Arts)
Senegal	Ministry of Culture (Direction de la Cinématographie); FOPICA	Fondation Sonatel; Goethe Institut Senegal; Institut Français du Sénégal
Ethiopia	Ministry of Culture and Sport	Goethe Institut Ethiopia; Alliance Ethio Française
Uganda	Ministry of Gender, Labour and Social Development; Uganda National Cultural Centre	Bayimba Foundation; Goethe Zentrum Kampala
Tanzania	Ministry of Information, Culture, Arts and Sports; BASATA	Vodacom Tanzania Foundation; Goethe Institut Tanzania
Zimbabwe	Ministry of Youth, Sport, Arts and Recreation; National Arts Council of Zimbabwe	Culture Fund of Zimbabwe Trust; Nhimbe Trust
Côte d'Ivoire	Ministry of Culture and Francophonie	Fondation Orange Côte d'Ivoire; Fondation Donwahi; Institut Français de Côte d'Ivoire

8.3 Funding Gaps for AI-Art Experimentation

Despite the diversity of sources, a structural failure to fund AI-art is evident across the region:

- Absence of AI-focused grants: No major MEA funder, state-backed or independent, currently offers a dedicated stream for AI-art research, production, or ethical innovation, despite rapidly increasing relevance.
- Misalignment of existing "Digital" funding: Existing digital funding from bodies like AFAC or the British Council tends to frame digital art broadly, without acknowledging:
 - unique compute needs,
 - ethical challenges,
 - linguistic inequities,
 - infrastructural costs,
 - or the political stakes of AI in MEA contexts.
- Cost of compute and infrastructure: Artists such as Nigerian innovator Malik Afegbua self-finance expensive GPUs, subscriptions, and cloud computing—luxuries for most African and Arab practitioners.
- Dependence on external programs: The S+T+ARTS Afropean Intelligence Programme provides ten residencies across five African countries, a meaningful contribution but minuscule relative to continental demand.
- Heritage-focused, not artist-focused funding: UNESCO's Culture and Digital Technologies Programme prioritizes heritage (Virtual Museum of Stolen Cultural Objects, Dive into Heritage, World Foodways Atlas) rather than contemporary artistic experimentation.

Crucially, almost no European public or private funding partners have initiated dedicated funding for AI and ART, further exacerbating the regional resource gap.

8.4 Uneven Development: Gulf Hyper-Investment vs. Continental Scarcity

The funding landscape reveals a stark polarity:

- Saudi Arabia, UAE, and Qatar invest billions into AI infrastructure, digital museums, data labs, and new-media institutions (Diriyah Art Futures, Art Dubai Digital, NEOM's creative technologies).
- Tunisia, Morocco, Kenya, Ghana, Egypt, and others maintain strong artistic ecosystems but lack AI-specific infrastructure, compute resources, or stable funding streams.
- Fragile contexts (Sudan, Libya, Yemen, Beirut after the explosion) face disruptions that place AI experimentation entirely out of reach.

This dynamic risks deepening internal regional inequalities, entrenching Gulf cultural hegemony, and marginalizing other MEA narratives within global AI-art discourse.

9. Ethical Considerations for Artists and Institutions

This section provides the ethical and governance frameworks needed to interpret the risks in Sections 4, 5, and 6 and to guide responsible institutional responses. The previous chapters mapped how AI enters artistic ecosystems in Africa and the Middle East and outlined the risks and structural barriers that shape practice. Here the focus turns to ethics: which values should guide decisions about when and how to use AI, what responsibilities fall to artists and institutions, and how cultural organizations can build internal reference points for future work.

9.1 Why an Ethical Frame Is Necessary

AI is not neutral in artistic contexts. It influences who is visible, whose work circulates, which stories are amplified, and which skills are rewarded. Tools can enable new forms of collaboration and expression, yet they can also introduce confusion about authorship, pressure to accelerate production, and uncertainty about how personal or community data will be used.

For socially engaged organizations, this is not a peripheral concern. Their legitimacy depends on trust, especially when they work with neighborhoods, youth groups, and communities whose participation is based on personal relationships. Any use of AI that touches images, voices, or narratives from these contexts must therefore be handled with care. An ethical frame provides a common language for discussing these issues internally and with collaborators.

9.2 Core Principles for AI in Artistic Practice

The core ethical principles for AI in artistic practice, drawn from existing literature and community guidelines, include the following:

- **Transparency and legibility** Artists and participants should be able to understand, at least in broad terms, how AI is being used in a project. This includes what tools are involved, what data they rely on, and how they influence the final work. Full technical detail is not always necessary, but hidden use of AI undermines trust [46].
- **Consent and data care** When AI projects use material drawn from identifiable people, places, or communities, consent should be obtained in ways that match the sensitivity of the content and the nature of the relationship. This includes clarity about how long data will be kept, who will have access to it, and whether it may be reused in future works [46, 47].

- Attribution and artistic lineage AI systems can blur the boundaries between original creation, adaptation, and imitation. Ethical practice requires attention to lineage: acknowledging sources, influences, and collaborators, and avoiding claims that AI generated work is entirely “from scratch” when it clearly builds on existing cultural material [47].
- Inclusion and accessibility AI projects should consider who can participate, both as creators and as audiences. This involves language choices, interface design, and an awareness of infrastructural constraints. An ethical approach avoids creating exclusive spaces that are only accessible to those with the latest devices or the highest levels of technical literacy [47, 48].
- Proportionality and appropriateness Not every project benefits from AI. The choice to use these tools should be guided by a clear sense of purpose. If a technology adds complexity without enriching the artistic or social dimensions of the work, it may not be appropriate. In some cases, low tech or no tech methods will better serve the project’s aims [49].
- Care for resources and sustainability Intensive AI processes consume energy and hardware. While individual projects may have modest footprints, it remains important to consider whether the scale of computation matches the artistic need and whether lighter alternatives are available [48, 49].

These principles are intentionally broad. They are meant to be adapted to specific disciplines, communities, and institutional cultures rather than enforced as rigid rules.

9.3 Typical Ethical Dilemmas for Artists

Applying these principles in practice leads to a series of recurring dilemmas that artists in the region already encounter or anticipate.

One involves style imitation. Generative models can approximate the look or sound of recognizable artists. Using such capabilities without acknowledgment risks undermining colleagues and mentors. Even when models are trained on large, mixed datasets, artists may recognize elements of their own work in outputs. Ethical practice suggests being cautious about deliberately mimicking identifiable styles and being explicit about the role of AI when such echoes occur [50].

Another dilemma arises in community projects. When working with photographs, audio recordings, or stories gathered from participants, artists must decide whether and how to run them through AI systems. Questions include whether participants understand what it means for their image or voice to be transformed, whether the resulting outputs might circulate beyond the original context, and how to respond if someone later changes their mind. There is also the issue of expectations. Some funders and audiences now associate innovation with visible use of AI. Artists may feel pressure to incorporate these tools even when they are unsure about their ethical implications. Navigating this tension requires spaces where artists can articulate their concerns and where institutions are willing to support work that experiments with AI thoughtfully or chooses not to use it at all.

9.4 Responsibilities of Cultural Institutions

Cultural organizations have a distinct role in shaping ethical practice because they act as intermediaries between artists, communities, funders, and technology providers. Several responsibilities follow from this position.

- Establish baseline guidelines: Institutions can establish baseline guidelines for AI related projects. These do not need to be elaborate legal documents. A short internal note explaining the organization's expectations around transparency, consent, and attribution can already provide useful orientation. The establishment of context sensitive ethical frameworks significantly improves the legitimacy and inclusiveness of AI applications in heritage [51].
- Invest in shared literacy: Organizations can invest in shared literacy. Workshops, reading groups, or internal seminars help staff understand the capabilities and limits of AI, making them better partners for artists who wish to explore these tools. This literacy should cover both creative possibilities and basic considerations around data protection, copyright, and long term storage. Training and capacity building programs are necessary to reduce knowledge gaps in AI techniques.
- Act as buffers: Institutions can act as buffers. They can negotiate with vendors, manage infrastructure, and host shared resources such as accounts, equipment, or local servers, reducing the burden on individual artists. They assume responsibility for ensuring that contracts and technical setups align with their ethical commitments, for instance, by promoting the development of user friendly, open source tools.

- Create channels for feedback: Cultural organizations can create channels for feedback. Artists and communities need ways to raise concerns when AI related projects feel uncomfortable or when unintended effects emerge. Community involvement is essential to ensure methods are suitable for cultural contexts and durable. Establishing Ethics Committees or advisory panels can oversee and guide ethical implementation.

9.5 Emerging Guidelines from Creative Communities

In recent years, groups of artists, curators, technologists, and researchers have begun formulating practical guidelines for AI in creative work, with discussions at international forums like the World Economic Forum emphasizing the need to navigate this augmented future [52]. While the specific formulations vary, they share several recurring themes that are relevant for institutions like L'Art Rue.

Recent Mozilla work with creative communities offers a complementary framework. In collaboration with the Berggruen Institute and ninety one creators from film, television, music, technology, and academia, Mozilla articulated "8 Rules for AI from Creative Communities," [53] a set of principles describing how AI tools should relate to artistic process rather than simply to scale and output.

They emphasize that AI should support, not replace, the exploratory phases of creation. Systems should be designed to encourage unexpected connections, productive mistakes, and reflection, rather than to optimize only for speed or volume of output. The Mozilla rules support this by emphasizing that AI should be designed to support exploration instead of shortcutting it, and that human purpose and artistic intent must remain at the center. This aligns with the mantra that AI should be a tool used to enhance all human creativity, not be a replacement for it.

They call for tools that make their operations legible, allowing creators to see and influence how data is used and how models arrive at particular results. The Mozilla rules advocate for transparent, conversational systems that allow artists to see and influence how models make decisions. The importance of a human centred approach is paramount to avoid losing "the heart and soul of the creative industries".

They insist on traceability and attribution. Creative communities have argued that AI systems should preserve information about the sources and processes that contribute to a given output, making it easier to recognize influence and assign credit. The Mozilla framework supports this by calling for tracing and honoring the lineage of creative work, ensuring that AI systems protect attribution and credit instead of dissolving it into anonymous datasets. Ethical practice involves being cautious about deliberately mimicking identifiable styles. For instance, legendary producer Nile Rodgers stipulated that he "certainly wouldn't use it to imitate somebody else" [52]. This is particularly important when works draw on shared archives or community materials.

They value friction. Rather than eliminating every difficulty in the name of efficiency, good tools leave room for slow thinking, revision, and doubt. The Mozilla rules emphasize keeping productive friction in the creative flow so that difficulty can spark invention rather than be eliminated in the name of efficiency, and for valuing slowness and depth so that ideas have time to mature. Many artists describe these moments of friction as essential to the development of strong work. AI that bypasses them entirely risks flattening the creative process.

Finally, these guidelines stress that AI should be evaluated not only by what it produces, but by how it affects the broader ecosystem: the distribution of opportunities, the health of communities, and the sustainability of cultural infrastructures. The Mozilla rules advocate for designing AI with the entire creative ecosystem in mind, and there is a strong call to ensure that AI adoption is inclusive, particularly for the 2.6 billion people who still lack internet access and the 90% who lack the computing power to use AI [52].

For institutions like L'Art Rue, these principles provide a concrete, practice oriented reference point for framing internal reflection on tool choices and governance questions around AI in the arts.

9.6 How These Principles Guide the Rest of the Study

The ethical considerations outlined here serve as a reference point for later sections of the report. When examining regional initiatives, institutional experiments, or potential program designs, the analysis returns to these questions:

- Does this use of AI make processes clearer or more opaque.
- How does it handle consent, data, and attribution.
- Whose participation does it enable, and whose does it implicitly exclude.
- Does it enhance or erode the conditions for sustained, community rooted artistic practice.

For organizations like L'Art Rue, these questions can help evaluate existing work, shape future projects, and communicate clearly with partners and funders about its approach to AI. They provide a normative backbone for engagement with new technologies while remaining grounded in the organization's long standing commitments to social engagement, artistic depth, and respect for the communities with which it works.

10. From Mapping to Future Directions

This section closes the mapping portion of the report by naming the most consequential gaps in knowledge and by sketching illustrative openings that emerge from the patterns described so far. It remains an *état des lieux*. The future-facing elements below are framed as perspectives and possible trajectories, not as recommendations or an implementation plan.

10.1 Critical Gaps and Open Research Questions

This research clarifies broad patterns in how AI intersects with artistic ecosystems in Africa and the Middle East, but it also reveals important blind spots. These are not minor details that can be filled in later. They are structural gaps that limit the ability of artists, institutions, and funders to make informed decisions about AI.

This section translates those gaps into a concrete research agenda. It links back to the report's initial questions: how artists encounter AI in practice, which constraints shape that encounter, and how cultural organisations can respond in a way that is both imaginative and responsible.

10.1.1 How Artists Actually Use AI

Most available material consists of festival catalogues, interviews with a small number of visible creators, and media profiles of "AI pioneers." What is missing is systematic evidence about everyday practice.

Key questions that require empirical work:

- Which tools are artists using in reality, rather than in theory
- How access differs by discipline, city, age, income level, and training
- How artists modify workflows when bandwidth is low or tools fail
- Which ethical or practical concerns arise during concrete projects
- What forms of support artists themselves prioritise

Answering these questions will require structured interviews, surveys, and close observation across multiple art forms, not only isolated case studies.

10.1.2 Regional Comparisons Rather Than Single-Country Views

Tunisia appears in this report as a central reference point, yet many dynamics described here are shared with neighbouring countries. Others are not. There is little comparative work that looks at AI and the arts across the Maghreb or across selected hubs on the continent.

Future research should map:

- Differences in digital infrastructure and cultural policy between Maghreb countries
- How funding ecosystems vary between North Africa, the Levant, the Gulf, and sub-Saharan hubs
- Where cross-border collaboration is already happening and where it could be strengthened

Such comparisons would prevent any single national context from being treated as a proxy for the whole region.

10.1.3 Language Technology in Artistic Contexts

Technical benchmarks for Arabic and selected African languages exist, but almost none focus on artistic or cultural usability. Models are tested on question answering, classification, or generic text generation, not on song lyrics, dialogue, poetry, or hybrid everyday speech.

There is a clear need for:

- Evaluation of existing models on artistic tasks in Arabic and key regional languages
- Documentation of how writers, musicians, and performers experience current tools
- Feasibility studies for community-driven datasets in under-served languages
- Practical guidance on combining multiple languages and scripts inside one workflow

Without this layer, language remains treated as a narrow technical issue rather than a central artistic concern.

10.1.4 Economics of AI in Artistic Practice

The economic side of AI in the arts is still largely speculative. Individual artists report that tools are expensive, yet there is very little structured analysis of costs, trade-offs, and possible support models.

Priority questions include:

- Real monthly and yearly costs of AI tools for artists at different income levels
- The financial and logistical impact of hardware imports and currency fluctuations
- Models for shared infrastructure, such as cooperative studios or pooled cloud accounts
- The relative value of open-source tools versus proprietary platforms in low-resource settings

Such analysis would help cultural organisations design realistic programs instead of relying on assumptions about affordability.

10.1.5 Long-Term Impact on Artistic Trajectories

Almost all current discussion of AI and art focuses on early adoption. Very little is known about what happens over five or ten years when artists integrate AI into their practice or decide not to.

Longitudinal research could track:

- How creative identity evolves when AI tools become routine
- Whether AI opens new career paths or increases precarity
- How audiences respond to AI-heavy work over time
- Whether socially engaged and community-based practices are strengthened or weakened

These questions matter for institutions that plan residencies, training, or multi-year programs around AI.

10.1.6 Gender and Inclusion

Gendered dimensions of AI use in the arts are almost entirely absent from current literature in the region. Access to training, equipment, funding, and professional networks is already uneven. AI may intensify or reshape these patterns, but there is little data.

Future research should examine:

- Differences in access to AI tools and training for women and men artists
- How safety and privacy concerns influence willingness to experiment with AI
- The specific impact of synthetic media and voice technologies on women and marginalised creators
- Opportunities to design training and governance practices that centre inclusive participation

Without an explicit focus on inclusion, new AI initiatives risk reinforcing existing imbalances.

10.1.7 Evaluating Context-Sensitive AI Frameworks

A growing number of ethical frameworks and guidelines promise more responsible AI. Many of them emphasise participation, transparency, and cultural relevance. What remains unclear is how these principles perform when applied inside actual artistic projects, under real constraints.

Research is needed to:

- Document pilot projects where such frameworks have been adopted by artists or institutions
- Analyse what worked, what failed, and why
- Identify the organisational conditions required to turn high-level principles into everyday practice
- Translate lessons learned into simple tools, checklists, or contracts usable by small organisations

This would move the conversation from abstract values to testable methods.

10.1.8 Institutional Capacity and Organisational Practice

Most analysis of AI in the arts focuses on individual creators. Much less attention is given to the institutions that host them. Cultural spaces differ widely in staffing, technical skills, equipment, and governance. These differences shape what is possible.

Key open questions:

- What capacities are needed for an organisation to host AI-related residencies or labs
- Which roles are essential: technical, curatorial, legal, educational
- How institutions can collaborate to share expertise instead of duplicating efforts
- How to document and transmit institutional learning so that each initiative does not start from zero

A clearer picture of institutional capacity would help funders and networks design support mechanisms that are realistic and sustainable.

10.1.9 Legal and Governance Environment around Creative AI

Finally, there is limited mapping of how current laws and regulations in the region intersect with AI-assisted artistic work. Copyright, contract practice, moral rights, data protection, and platform terms of service all influence what artists and organisations can safely do.

Further work should:

- Survey existing national frameworks and regional instruments relevant to AI and cultural production
- Identify gaps that leave artists unprotected or uncertain
- Explore practical templates for contracts, consent forms, and licensing adapted to AI contexts
- Analyse how cultural organisations can participate in ongoing discussions on AI governance

Clarifying this environment would not only reduce risk. It would also give artists and institutions a stronger basis to shape the rules that will govern AI in the cultural field.

Taken together, these research directions form a coherent next phase. They move from broad diagnosis to targeted inquiry, building the knowledge needed for artists and cultural organisations in Africa and the Middle East to engage with AI on their own terms rather than merely adapting to external agendas.

10.2 Illustrative Pistes for Artists

Alongside research gaps, the report also surfaces several practical openings already visible in regional practice. These pistes are framed as artistic trajectories that can be pursued selectively, often at small scale, and often under infrastructural constraint.

First, treating AI outputs as material rather than as finished work. In several domains, the creative interest is not only in what a system generates, but in how an artist edits, composes, and stages the generated fragments, including moments of failure, misrendering, or incompleteness.

Second, working with language as an artistic interface. For writers, performers, and visual artists using text, prompt work can become part of composition. Dialect friction, translation, and script instability can be approached as creative conditions to be exposed, inhabited, and contested rather than hidden.

Third, building locally rooted inputs where possible. Low-data approaches, small archives, and community-held materials can shift the artistic relationship to AI away from pure consumption of global models and toward situated making, including projects that preserve or reanimate fragile repertoires in sound, image, or narrative.

Fourth, using festivals and peer communities as production infrastructure. Cinema, sound, and immersive practices already show how shared learning spaces can lower barriers, circulate techniques, and provide critical discussion, especially when formal institutional support is limited.

10.3 Illustrative Pistes for Cultural Institutions

For cultural organisations, the openings that emerge from this report are less about building laboratories and more about shaping conditions for responsible experimentation and sustained practice.

One piste is to document what is already happening. Mapping how artists in a network actually use tools, where workflows break, and what ethical questions recur can become a durable institutional resource, particularly when shared in accessible formats.

Another is to provide modest, shared scaffolding. This can include basic access to accounts, equipment, connectivity, and convening space, alongside internal literacy that enables staff to discuss AI with artists in practical terms rather than abstract debate.

A third piste is to treat language and consent as design constraints for any AI-related programming. This includes multilingual facilitation, sensitivity to dialect and script, and clear practices around attribution, data handling, and community understanding.

Finally, institutions can host dialogue that is missing elsewhere. Bringing artists, technologists, legal voices, and funders into the same room can clarify uncertainties and reduce the sense that each practitioner is navigating AI alone.

10.4 The Role of L'Art Rue and Similar Institutions

Within this landscape, the roles below are presented as illustrative openings rather than a program blueprint.

L'Art Rue sits at a crossroads where neighbourhoods, artists, and international partners already meet. Its experience with socially engaged practices, long-term community relations, and large-scale events such as Dream City gives it a distinctive profile compared with many digital or research-led institutions. This position can be used to anchor a particular approach to AI in the arts.

The report suggests several complementary roles that an organisation like L'Art Rue can assume:

- A listening hub, where artists, technicians, and local partners can describe their experiences with AI in their own terms, without pressure to follow pre-defined narratives of innovation or disruption.
- A laboratory for careful experimentation, where small groups can try AI tools in controlled settings that prioritise consent, transparency, and artistic intent.
- A bridge between practice and governance conversations, translating the concerns of artists into language that funders, regulators, and technology developers can understand.
- A reference point for ethical questions, helping to clarify issues of authorship, consent, and data use in collaborative and community-based projects.

By taking on these roles, L'Art Rue can help ensure that AI is introduced into its ecosystem in a way that strengthens, rather than weakens, the core values that have guided its work so far: attention to place, respect for lived experience, and commitment to collective imagination.

The conclusion that follows synthesises the report's findings into an orientation toward dignified technological futures, drawing the analytical threads together without shifting the report into prescriptive planning.

11. Toward Dignified Technological Futures

This study shows that the meeting point between AI and the arts in Africa and the Middle East is not a niche curiosity but a structural shift. AI arrives in environments shaped by uneven infrastructure, limited access to hardware and cloud services, fragile funding systems, and significant gaps in language support. Artists work inside these constraints every day. They improvise workflows around unstable connections, navigate unfamiliar tools, and face new questions about authorship, consent, and the integrity of cultural memory.

At the same time, the research highlights a wide range of constructive responses. Grassroots language initiatives build tools in African languages. Festivals and labs test AI in cinema, sound, and immersive practices. Publishers experiment with AI in editing, translation, and cover design. Writers probe the boundaries of co-authored fiction. Programs like TACIR, institutes focused on worldmaking and archives, and a growing network of workshops and unions all show that AI in the region is not only something imported from abroad. It is also a material that is being reshaped locally, through experimentation and critical reflection.

11.1 A Theory of Change for Cultural Institutions

These structural patterns underscore the need for institutions to translate broad debates about ethics, accountability, and cultural autonomy into practical steps that fit their own scale and responsibilities. Taken together, the findings support a simple but demanding theory of change for cultural organisations that want to work with AI in a responsible way. First, understand the ground. Map how artists actually encounter AI, which tools they can access, where infrastructure fails, and which fears or hopes are most present in their daily practice.

Second, translate this understanding into shared language. Identify the main risks and possibilities in terms that make sense to artists, producers, technicians, and funders, rather than only to engineers or policymakers.

Third, co-design practical guidance. Develop principles, checklists, and simple procedures for consent, data use, authorship, and credit that can be applied in real projects under real constraints.

Fourth, test ideas through small, carefully framed experiments. Short residencies, labs, or collaborative projects can function as sandboxes where tools, ethics, and artistic questions evolve together.

Finally, consolidate what is learned. Document successes and failures, share them with regional partners, and adjust frameworks so that they remain grounded in lived practice rather than abstract ideals.

If this sequence holds, AI becomes less of an external force and more of a negotiated medium shaped by artists and communities.

11.2 Dignity as a Design and Governance Principle

The notion of dignified technological futures provides a useful way to summarise the orientation that emerges from this study. Dignity, in this context, does not refer to grand declarations. It refers to a set of practical conditions for how AI tools are developed and used in artistic life.

A dignified approach to AI in the arts would mean at least the following:

- Artists understand what a tool does, where its training material comes from, and which trade-offs they accept when they use it.
- Communities involved in socially engaged work know how their images, stories, and voices will be handled, and retain the ability to say no.
- Linguistic diversity is treated as a design requirement, not an afterthought, so that artists can create in the languages and registers that matter to them.
- Experimentation is encouraged, but not at the expense of safety, credit, or long-term sustainability.
- Institutions have enough technical and organisational capacity to support AI projects without outsourcing all decisions to external platforms.

In such a setting, AI becomes one instrument among many in the cultural toolkit. It can help restore damaged archives, open new compositional techniques, or lower barriers for certain forms of production. It does not decide what counts as valuable art, nor does it define which languages or memories matter.

The work presented in this report is an early step in that direction. It gathers scattered signals into a single map and outlines a pathway for cultural organisations in Africa and the Middle East that choose to engage with AI. The central proposal is simple: technological change in the arts should be guided by the same care that artists already apply to space, language, and community. If AI is approached with that level of attention, it can contribute to futures where creativity remains rooted in human experience, even as the tools that support it evolve.

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