Exploring the Challenges and Opportunities of Digital Art in Contemporary Exhibitions on Social Media Platforms: Insights from Practitioners

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ARTICLE INFO	ABSTRACT
	This research investigates the multifaceted landscape of electronic art exhibitions on social media platforms in Pakistan, focusing on technological challenges, social media utilization, and global accessibility concerns. Drawing on the Media Aesthetic Theory, Stuart Hall's Encoding/Decoding model, and Actor-Network this study aims to uncover the challenges and opportunities facing digital art in contemporary social media contexts. Using a semi-structured interview approach, adopted by Pitts (2020) fifteen emerging visual artists were interviewed. The interviews focused on understanding the artists' perspectives on digital exhibitions, exploring technological innovations, artistic anatomy, and ethical considerations. The findings highlight a synthesis of technological innovations and the complexities of this digital terrain within an inclusive and ethically responsible art
	ecosystem. Prospects, accounting of respondents' perspectives, include enhanced content moderation, curatorial flexibility, and global reach. Challenges encompass algorithmic bias, lack of training, and financial constraints while ethical quandaries representing respondents' insights pertain to cultural sensitivity, environmental responsibility, and equitable collaboration. The study underlines the complexities of the digital landscape, advocating for an integrative and ethically responsible art ecosystem. Addressing these complexities, digital art practitioners stress the importance of transparency, community engagement, and promotion of innovation in the Pakistani art scene. These insights stress the multifaceted landscape of digital art and social media, with careful maneuvering of ethical and impactful artistic expressions.

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1.   Introduction

The artistic landscape has become encyclopedic from traditional art forms of cinema, dance, theatre, photography, painting, sculpture, photography, music, and literary works to its complete 'digital formation'. Contemporary digital art creation like NFT (non-fungible token) art, video games, and net art is done with various "Chatbots"; DeepArt, Artbreeder, and Doodlebot using artificial intelligence (AI), natural language processing (NLP), and machine learning (Messer, 2024; Pawelzik & Thies, 2022). The phenomenon of digital art has ensured the preservation of core traits identification, preexistent in the world's aesthetics. The manmade contraption of "computer" (counting) and "digital" (binary representation) has undergone four evolutionary phases: (1) early adoption and experimentation (1950-1970), (2) mainstream integration and the digital revolution (1980-1990), (3) internet and social media (2000-Present) and (4) AI and advanced technologies (Giannini & Bowen, 2019) to accompany the traditional cultural production process, especially in Pakistan (Khalid, 2021; Takala, 2023; Wille, 2017). Today's digital art (DA), in its brilliance, reflects the entirety of history's tapestry from 'Prehistoric

Art', 'Ancient Art', 'Classical Greek and Roman Art', 'Medieval and 'Gothic Art', 'Renaissance Art', 'Baroque and Rococo Art', 'Modern Art' to the 'Contemporary Art' (Bryan, 2018; Montagu, 2023) (*Library Guides: Art History: Encyclopedia & Biographical Sources*, n.d.; *Digital art | Encyclopedia.com*, n.d.; *The Philosophy of Digital Art*, 2023). In Pakistan the essence of digital art is infused with the fragrance of cultural richness in its soul and the earth from the ancient and Indus Valley Civilization", "Islamic Art", "Mughal and Persianate Art", "British Colonial Period", "Modern and Contemporary Art", "Folk and Traditional Art" to the "Experimental and New Media Art" of today (Hamdani & Qureshi, 2024; Kumar, Ali, & Khoso, 2020; Petersen, 2020; Quilley, 2020; Ramesh, 2023; Saleem & Power, 2023; Tassadduq & Sulaiman, 2022; Waraich, 2023; Yusuf, 2023; Zahra & Azam, 2023).

Digital media exhibitions (DMEs), especially on social media, are the inception of dynamic curation opportunities for artistic expressions: interactive installations, generative art, and immersive exposure to expand interactive realities through "Video Spacing", "Cybernetic Sculpture", "Computer Animation", "Algorithmic Art" (Ezcurra, 2023; Hutson & Harper-Nichols, 2023; Paul, 2023). On the other hand, ethical and philosophical implications are becoming a dire need to control the issues of "biohacking", "Synergistic Human-Technology Integration" (Admin|In conversation with Sofia Hardt - Lahore Digital Arts Festival, 2021, March 18)*, "Post-Reality Subjectivity"* (Admin| In conversation with Sibel Mufti - Lahore Digital Arts Festival, 2021, March 25), "Generative Adversarial Networks (GANs)", "Style Transfer" with accessibility and democratization of artworks (Goodfellow et al., 2020; Hallén, Forsman, & Eriksson, 2023). particularly for developing countries amateur or developing artists. This study inquires about the existing gap to burden the artists creating and exhibiting electronic arts even without proper resourcefulness to preserve traditional artworks. First, it was a matter of choice and good luck to have technical assistance like the landmark exhibitions of *"Cybernetic Serendipity 1968" (Mey, 2021),* "Software 1970" *(Histories of the Digital Now),* and *"Art and Technology (1971) at LACMA" (Burnham, 2023, September 26)*, "*Rain Room"* by Random International, *Machine Hallucination* (Refik Anadol Studio, 2023, January 18), "Every Wall is a Door" (Robert, 2022), *Mediated Matter Group (Oxman, 2021; TeamLab, 2021, November 16)* and Google's "Deep Dream" (Kim, 2020, April 4; The MIT Press Reader, 2021, May 28). Gradually, drawbacks and limitations of technological experimentations in art and questions about obsolescence and degradation are still a question mark on the syndrome of "outdated technology" in software compatibility and hardware requirements for art preservation and archiving strategies (Allioui & Mourdi, 2023).

2. Literature Review and Theoretical Framework

Electronic art exhibitions are a necessity for Pakistani artists to break down the barriers of inaccessibility, especially after the COVID pandemic, and to compete with the hype of AI from all corners of the globe. Moreover, e-exhibitions can empower artists to explore innovative mediums such as "Virtual Reality" (Gutierrez, 2023; Luckey, 2020), "Augmented Reality", Head-Mounted Displays (HMD) (Harley, 2020; Sutherland et al., 2019), and "Generative Reality" (García-Peñalvo, Llorens Largo, & Vidal, 2023). Furthermore, challenges of technical hurdles, copyright issues, sustainability concerns, and engagement difficulties also exist according to contemporary artists in the country Pakistani Digital Artists (n.d.); Visual Arts (n.d.). With the passage of time unequal access to the Internet is creating a "digital divide" Fang, Canham, Battersby, Sixsmith, Wada, and Sixsmith (2019) for unprivileged or rural artists while opportunities for the leveraged ones as high costs are associated with a long list of digital tools, and talent drain due to mismatching educational expertise Jamil and Muschert (2024) for digital art exhibitions in Pakistan. Inconsistent quality due to a lack of standardized structured training programs (Peters, 2022) especially software requirements (content management system, exhibition management systems, presentation software, interactive software, augmented reality (AR), virtual reality (VR), web-based exhibitions, live streaming, social media, and collaborative platforms without the constraints of "physical space" (Charitonidou, 2020; Treleani & Zucconi, 2020). Moreover, other tools: QR Codes, NFC (Near-Filed Communication) Tags, 3D Scanners, and 360-degree cameras) for theft prevention and to digitalize or digitally produce original artwork on the digital canvas, causing "professional isolation" among artists (Saeed, Iqbal, Sherazi, & Khan, 2019).

Intellectual property (IP) rights issues due to the interference of artificial intelligence (Bozard, 2023) and the emergence of Metaverse-based art galleries (Fraser, 2023; Hurst, Spyrou, Tekinerdogan, & Krampe, 2023; Jim, Hosain, Mridha, Kabir, & Shin, 2023; Slob, Hurst,

Van de Zedde, & Tekinerdogan, 2023) are also the biggest challenges to monetizing digital art effectively and securely (Mushtaq, Baig, Bukhari, & Ahmad, 2024). Unfortunately, artists are vulnerable to exploitation and privacy breaches due to weak IP laws and enforcement mechanisms to safeguard their work. Social capital bonding due to the limited exposure; thousands standing for a handful of opportunities, and network deficiency is destitute to gain visibility and credibility for global reach marketing and promotion. Traditional societies especially religious ones do not appreciate change wholeheartedly likewise is the case in Pakistan as "social acceptance" Thompson (2018) of legitimate artistic expressionism within traditional art communities is very rigid with a parallel issue of quality vs. popularity due to social media influence. Consequently, institutional support of grants, funding, proper lodgings, and supportive policy vacuum for sustained artwork practices are not substantial within the country, making artists dependent on external resources (Kohtamäki, 2024). Moreover, virtual exhibition platforms undergo slow adoption (Pinho, Franco, & Mendes, 2021) and technical barriers due to the perceived usefulness by ensuring solutions for copyright issues (Appio, Frattini, Petruzzelli, & Neirotti, 2021) and ease of use among artists and exhibition curators.

Furthermore, the ethical implications of surveillance technologies, data collection methods, and algorithmic decision-making processes in artworks (Dekker, 2021) raise privacy, autonomy, and human rights issues as the use of imagery, symbols, or cultural references from marginalized communities without proper attribution or understanding can perpetuate harmful stereotypes to cultural erasure (Bright & Bakewell, 2022) shaping user experience (Kozinets, 2022). In this study literature review has been built around the theoretical framework with innovation diffusion theory and cultural theory to explore opportunities and challenges (Q1), social capital theory to see the utilization mechanism of social media (Q2), and intellectual property theory and institutional theory to investigate the global barriers in their way of accessibility and authenticity creating digital artwork (Q3) among art practitioners. In this paper, the theoretical framework is based on media aesthetic theory (MAT) with the foundational work of McLuhan, the encoding/decoding (E/D) model of Stuart Hall (1980), and the Actor-Network Theory (Latour, 1987). MAT is surrounded by many theorists but in this research, three prominent theorists' seminal work: Marshall McLuhan (1964) for exploring the technological sculpturing of human perception and culture with the transformative effects of "the medium is the message" on art practitioners; Walter Benjamin's essay (The Work of Art in the Age of Mechanical Reproduction, 1936) to examine the reproducibility of artwork through technological means (Benjamin, 2018) and Jean Baudrillard's *Simulacra and Simulation* originally of 1981 to check the hyperreality's role in constructing experiences and identities of digital art practitioners in societies like Pakistan have been considered (Baudrillard & Glaser, 1994; Callon, 1984).

Cultural studies theories, particularly the Stuart Hall E/D Model (Fornäs, 2024) examine the production side of media messages along with their dissemination and cultural interpretations in shaping the digital art narrative among its producers and users. Actor-Network theory (ANT) by Bruno Latour, focuses on the complex interaction between digital media technologies, artists, audiences, and cultural institutions to form networks to form media aesthetics (Latour, 2007). Undoubtedly media aesthetic theory often overlooks non-Western perspectives by emphasizing technology's role over human agency (Elsaesser & Hagener, 2015). Cultural studies theories can be overly interpretive and subjective (Baldwin & McCracken, 2014) and (Whittle & Spicer, 2008). ANT can overlook power dynamics and socio-political contexts causing a huge effect on networks by downplaying human agency (Whittle & Spicer, 2008). But still powerful enough to provide valuable insights into digital and post-digital art landscape, convergence culture, algorithmic influence, cultural critique, ethno-societal implications, and glocal dynamics along with interactive and immersive media (Mooney, 2020; Neumark, Gibson, & Van Leeuwen, 2023; Setiawan & Nufiarni, 2023).

2.1. Research Objectives
1. To explore the technological challenges in executing digital art exhibitions in Pakistan.
2. To investigate how social media platforms are utilized for exhibitions.
3. To analyze global accessibility concerns in digital artwork exhibitions.

2.2. Research Questions
1. In what ways do opportunities and challenges to curate digital art exhibitions influence digital art practitioners in Pakistan?

2.   How do visual artists utilize social media platforms to showcase their digital art exhibitions?
3.   What barriers affect global accessibility to digital art exhibitions?

3.   Methodology
3.1.   Research design
This study adopts content analysis (Drisko & Maschi, 2016) combined with descriptive statistics (Cooksey & Cooksey, 2020), correlation (Senthilnathan, 2019), and semi-structured interviews, based on the research of Stephanie E. Pitts (2020). An interview schedule was structured with three sections: (1) prospects and hurdles in digital art exhibitions, (2) social media platforms, and (3) ethical considerations encompassing technological intricacies, fluidity of curatorial practices, audience interactivity, the imperative of global inclusivity, the boundless artistic expression and ingenuity, in the speculative terrain of future trajectories and prognostications embracing the distinctive context of digital art exhibitions within Pakistan.

3.2.   Data Selection
Twelve digital art exhibitions on different social media platforms have been approached: (Adorasoft, n.d.) (23@Gallery6, 2023, March 17; Ejaz Art Gallery, 2024, January 20; I/Eye, 2022, May 19; Kaleidoscope with Savithri Rodrigo, 2023, August 12; Sensitive Content: 16-30 September 2023 ONLINE GROUP EXHIBITION, n.d. focusing on both factual information and deeper meanings {Rusakov, 2022 #70).

3.3.   Population
The population of interest comprises digital art practitioners in Pakistan, particularly those engaging in curating digital art exhibitions on different social media platforms. Additionally, participants for semi-structured interviews were purposively sampled to include practitioners representing diverse demographics, artistic styles, and levels of experience in the field of digital art and social media platforms.

3.4.   Sampling Technique and Procedure
The sample size of 15 digital artists was selected with purposive sampling (Bakkalbasioglu, 2020) to get expertise relevance, depth of insights, diverse perspectives, and efficiency, to achieve data saturation for understanding the challenges and opportunities of digital art exhibitions (DAEs) and social media platforms.

3.5.   Analysis
A mixed-method approach of content analysis, descriptive statistics, correlation, and semi-structured interviews for identifying key themes for various factors involved, a quantitative summary of data to enclose the prevalence of issues and opportunities, to examine the relationship between themes identified in descriptive statistics to understand the interrelated factors with the nuanced insights, perspectives, and experiences of digital art practitioners (DAPs).

3.6.   Operationalization of Key Concepts
3.6.1. Independent Variables
Algorithmic Bias: Social media favors certain content over others as a prejudiced reinforcement making visibility harder for other artists.

Lack of Training: Deficiency in formal education or resources for artists' social media and digital platforms professional learning in art promotion.

Financial Constraints: Costs of creating digital art, and curating its online exhibitions.

3.6.2. Dependent variables
Ethical Considerations: Cultural sensitivity, environmental impact in case of energy consumption and electronic waste, plagiarism and verification, interactivity and compatibility with online users.

Visibility and Reach: Artwork showcasing on social media platforms to connect with broader audiences.

Artistic Practices: Different social media platforms' impact on practitioners' creativity process.

3.6.3. Control Variables

Demographic and Artistic Mediums: Age, gender, and geographical location along with artworks from digital painting, and animation to 3D modeling have been considered as control variables in this study as these factors and different mediums may have different challenges and opportunities.

4.   Results and Discussion

Table 1: Descriptive Analysis of Prospects and Hurdles in Digital Art Displays

Features	Frequency	Percentage (%)	Source
Algorithmic bias, societal impact, proactive measures to mitigate biases	4	26.67%	Whittlestone, et al., 2019
Lack of training on social media for curating exhibitions, need for structured workshops	3	20.00%	Givoglu, 2019
Challenges in artistic expression due to algorithmic constraints	1	6.67%	Qiao, et al., 2019
Prospects of content moderation systems, enhancing user experiences through personalization	2	13.33%	Ruckenstein & Turunen, 2020
Freedom of expression, global reach	2	13.33%	Ruiz-Resto, 2023
Curatorial flexibility, aesthetic management	3	20.00%	Müller, 2021
Immersive, participatory experience facilitated by technology	1	6.67%	Enhuber, 2015
Accessibility and inclusivity in exhibition design	2	13.33%	Snyder, 2020
Financial constraints, costs associated with organizing electronic art exhibitions	1	6.67%	Duffy, 2017
Data privacy concerns, ethical considerations in handling personal information	2	13.33%	Javed, et al., 2020
Innovation in presentation formats, potential for experimentation with digital formats	2	13.33%	McKenna-Cress & Kamien, 2013
Collaborative opportunities, interdisciplinary unification	1	6.67%	Bonus & Ronte, 1997
Complexities of cultural appropriation	1	6.67%	Han, 2019
Gender spectrum and essentialism	1	6.67%	Fine, Gelman & Ho, 2023
Artistic freedom and censorship	1	6.67%	Blumenfeld, 2018

The findings in Table 1.1 present that the most frequently cited challenge is 'Algorithmic Bias', 'Societal Impact', and the need for proactive measures to mitigate biases, indicating a significant concern regarding the fairness and inclusivity of digital art curation algorithms. On the other hand, the lack of training on social media for curating exhibitions and the need for structured workshops, highlight the importance of education and skill development in this field. 'Artistic Expression' is also constrained by algorithmic emphasizing the need for more artist-friendly algorithmic frameworks. Conversely, the prospects of 'Content Moderation Systems' enhancing user experiences through personalization are recognized to illustrate the complex landscape of digital art displays on social media platforms. 'Freedom of Expression' and 'Global Reach' along with 'Curatorial Flexibility' and 'Aesthetic Management' are notable opportunities to democratize art access and allow curators greater creative control. Moreover, the immersive and participatory experience facilitated by technology is mentioned less frequently as a critical opportunity for audience engagement. Issues like 'Financial Constraints' (Duffy, 2017), 'Data Privacy Concerns' (Javed, et al., 2020), and the potential for 'Innovative Presentation Formats' McKenna-Cress and Kamien (2013) also highlight the multifaceted nature of digital art exhibition challenges and opportunities in Pakistan.

Table 2: Descriptive Analysis of Social Media as a Platform

Features	Frequency	Percentage (%)	Source
Role in popularizing art, global stage for showcasing work	4	26.67%	Marciszewska & Marciszewski, 2021

Balance between traditional and modern art forms	3	20.00%	Bramantyo, 2021
Promotion and engagement with international audiences	2	13.33%	Piancatelli, Massi & Vocino, 2021
Integration of AI and art	2	13.33%	Zhang & Lu, 2021
Accessibility and inclusivity	1	6.67%	Sidford, 2011
Community building	2	13.33%	Budge, 2015
Challenges in maintaining authenticity	2	13.33%	Warner-Søderholm, et al., 2018
Impact on artistic practices	1	6.67%	Chaulk, 2021
Emergence of niche communities	2	13.33%	Arfini, Bertolotti & Magnani, 2019
Navigating cultural sensitivities	2	13.33%	Bouvier, 2015
Need for digital art education	2	13.33%	Black & Browning, 2011
Promotion of cultural heritage	3	20.00%	Yang, et al., 2018
Digital collaboration opportunities	2	13.33%	Roy Chakraborty, 2022
Cross-cultural exchange	2	13.33%	Chan, 2019
Online art marketplaces	2	13.33%	Shahzadi, 2020

Table 2 illustrates popularizing art and a global stage for showcasing work, the most frequently cited advantage at 26.67% (Marciszewska & Marciszewski, 2021) underscores social media's ability to elevate 'Artists' Visibility' and 'Reach' diverse audiences. Balancing traditional and modern art forms is also a significant theme reflecting the preserving artistic heritage and embracing new digital methodologies. 'Promotion and Engagement' with international audiences along with the 'Integration of AI in Art' highlights the role of advanced technologies in broadening art's appeal and accessibility. 'Accessibility and 'Inclusivity' and 'Community Building' although mentioned less frequently are pivotal for fostering an inclusive 'Digital Art Ecosystem' (Martynovich, 2024). Challenges like 'Maintaining Authenticity', navigating 'Cultural Sensitivities', and the need for 'Digital Art Education (Black & Browning, 2011) each represent further attention and improvement are necessary. The promotion of 'Cultural Heritage' (Yang, Shafi, Song, & Yang, 2018), 'Digital Collaboration Opportunities' (Roy Chakraborty, 2022), and 'Cross-Cultural Exchange' (Chan, 2019) emphasize the transformative role of social media for the dynamic and interconnected global art community and 'Online Art Marketplaces' (Shahzadi, 2020).

Table 3: Descriptive Analysis of Ethical Quandaries

Features	Frequency	Percentage (%)	Source
Cultural sensitivity and Indigenous art	3	20.00%	Akhtar, et al., 2020
Depiction dilemmas	3	20.00%	Juneja, 2011
Artistic integrity and social impact	2	13.33%	Wolff & Wolff, 1981
Environmental responsibility	2	13.33%	Girak, et al., 2019
Amplifying marginalized voices	2	13.33%	Batt & Joseph, 2022
Community engagement	2	13.33%	Plumb, 2017
Transparency in intentions	1	6.67%	Kester, 2004
Equitable collaboration	1	6.67%	Bublitz, et al., 2019
Digital ethics	1	6.67%	Jensen, 2003
Institutional accountability	2	13.33%	Fatima, 2021
Indigenous preservation	2	13.33%	Dadi, 2010
Art as social activism	2	13.33%	Frostig, 2011
Diverse identity	1	6.67%	Oumlil, 2022
Market transparency	2	13.33%	Caves, 2000
Promotion of innovation	2	13.33%	Sawyer & Henriksen, 2024

Data in Table 3 delves into the 'Cultural Sensitivity' and 'Indigenous Art' being the most frequently mentioned ethical concerns reflecting the need for conscientious practices in digital art to respect and preserve cultural assets while 'Depiction Dilemmas' (Juneja, 2011) are equally prominent involved in portraying sensitive subjects ethically. "Artistic Integrity' and 'Social Impact' along with 'Environmental Consciousness' (Girak, Lummis, & Johnson, 2019), each highlight the broader societal implications of digital art practices. Amplifying 'Marginalized Voices' (Batt & Joseph, 2022) and 'Community Engagement' (Plumb, 2017) are crucial ethical

imperatives in fostering digital equity and digital inclusive participation (Sabariego Puig, Cano-Hila, & Masanet, 2024). 'Intentions Transparency' (Kester, 2004) and 'Equitable Collaboration' (Bublitz et al., 2019) are less frequently mentioned (6.67%) as being fundamental to trust building and fairness in digital art practices. 'Digital Ethics' (Jensen, 2003), 'Institutional Accountability' (Fatima, 2021), and the 'Preservation of Indigenous Cultures' (Dadi, 2010) emphasize the need for ethical guidelines and institutional responsibility as well. Lastly, 'Promoting Innovation' (Sawyer & Henriksen, 2024), 'Market Transparency' (Caves, 2000), and the role of art as 'Social Activism' (Frostig, 2011) highlight the potential of digital art to drive social change and ethical practice while emphasizing on 'Diverse Identity' (Oumlil, 2022) and 'Artistic Freedom' (Blumenfeld, 2018) to address ethical complexities in the digital art realm.

Table 4: Correlations between Key Points in Different Categories

Items	Prospects and Hurdles	Social Media Platform	Ethical Quandaries
Prospects and Hurdles	1.00	0.45	0.66
Social Media Platform		1.00	0.64
Ethical Quandaries			1.00

Note: Correlation coefficients are significant at the p < .05 level.
The correlation coefficient between Prospects and Ethics is r=0.66; Prospects and Social Media is r=0.45 and Social Media and Ethics is r=0.64 indicating a moderate positive correlation at the statistically significant level of P<.05 highlighting the interconnectedness of the categories studied.

4.1. Results Summary
The existence of primary challenges; algorithmic bias (26.67%), lack of training (20.00%), and artistic expression constraints (13.33%) address the challenges involved in improving training programs and creating algorithms that are more inclusive and fair (Q1). Social media significantly influence art promotion and engagement (20.00%), balancing traditional and modern art forms (13.33%), with integrating AI in art (13.33%) to democratize access to art, facilitating global reach and community building (Q2). Moreover, Key ethical reflections include cultural sensitivity (20%), accurate depiction of diversity (13.33%), maintaining artistic integrity and social impact (13.33%) respecting cultural heritage, promoting inclusivity, and addressing environmental and digital ethics (Q3).

5. Conclusion
The findings underscore the complex interplay between opportunities and challenges in electronic art exhibitions on social media platforms. While these exhibitions offer unprecedented reach and flexibility, they also present ethical dilemmas and technical hurdles. Addressing these challenges requires collaborative efforts from artists, platform developers, regulators, and users to ensure a safe and ethical online art ecosystem in Pakistan. Participants in this research have articulated a vision for the future implications, emphasizing the need for adaptable curatorial practices, professional educational initiatives, and penetrable community engagement strategies. However, structural barriers such as affordability, resource constraints, and regulatory uncertainties persist, hindering the full realization of digital art's transformative potential. To move forward, stakeholders must prioritize collaborative efforts to foster a supportive ecosystem that nurtures creativity while safeguarding cultural integrity and ethical values. In an AI-driven atmosphere, the artistic community needs special protocols related to IT advancements to show the face of artwork on international forums.

5.1. Research Implications
In the ever-evolving landscape of digital art exhibitions, social media platforms have emerged as powerful tools for the careers of visual artists and transforming the traditional paradigms of fine art, they also present significant challenges including "AI hells" (Bishop, 2023; Buchner, 2022) that must be addressed for the continued growth and success of electronic art exhibitions. The COVID-19 pandemic catalyzed the rapid adoption of online platforms, as artists and audiences alike turned to digital spaces to continue their creative endeavors and engage with art remotely. This shift underscored the resilience and adaptability of the art community, highlighting the importance of leveraging technology to overcome physical barriers and foster meaningful connections (Marciszewska & Marciszewski, 2021) while artists have reported balancing a practical approach with the traditional art forms needed for whole "art ecosystem" (Bramantyo, 2021). However, amidst the myriad opportunities afforded by social media platforms, challenges such as server overload, technical barriers, and concerns regarding copyright, security, and authenticity remain prevalent, necessitating a delicate balance between

innovation and adaptability to create a safe and enriching online environment (Cramer & Jandrić, 2021; Dwivedi et al., 2022) for artists and audiences alike (Yang et al., 2018). Moreover, Results have shown that artists are increasingly aware of their environmental responsibilities and experiencing a push to minimize digital art's ecological footprint (Girak, Lummis, & Johnson, 2019). Respondents have also witnessed concerns about algorithmic bias in social media platforms that can affect content visibility (Warner-Søderholm et al., 2018).

Furthermore, research findings indicate that social media platforms maintained by various art forums and communities in Pakistan should adopt versatility in the digital presentation of artwork as a third-party interference (NY., 2024`, April 18) along with providing all compulsory requirements for digital showcasing and curating of digital exhibitions by the art practitioners themselves. There is a dire need to provide opportunities for art tours for Pakistani artists as not a single self-made digital artist has been found to avail of any invited tour or exhibition display on international forums along with online participation being highly expensive digital conversions and protocols (Makransky, Andreasen, Baceviciute, & Mayer, 2021; Puello, 2024, July 2). Moreover, digital art theft and plagiarism issues require more proper solutions for emerging digital artists through proper funding and targeted initiatives like other countries and digital communities do (Kumar, Ali, & Khoso, 2020).

5.2. Limitations
In this study, the reliance on Pakistani visual artists and its primary focus on the perspectives of emerging visual artists can potentially be overcome by looking at the viewpoints of other stakeholders in the art community in future research with a more diverse sample and a broader exploration of the experiences and perspectives of artists, curators, and audiences.

5.3. Recommendations
On behalf of the comprehension of the present study, future research could take the initiative to explore the pervasive integration of artificial intelligence (AI) in social media along with ubiquitous AI in digital art on the functionalities of contemporary Pakistani art practitioners. Long-term research projects, annual surveys, and regular online art trends analysis to track digital art practices over several years. Forbye, a diverse panel of artists, legal experts, and information technology (IT) experts as a focus group can draft ethical priorities to deal with privacy, authenticity, and copyright issues practical and enforceable. Moreover, developing digital repositories for secure storage and documenting digital artwork, offering highly professional workshops, and fostering online art communities navigated with social media and AI can reduce the talent gap among Pakistani artists on international forums.

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