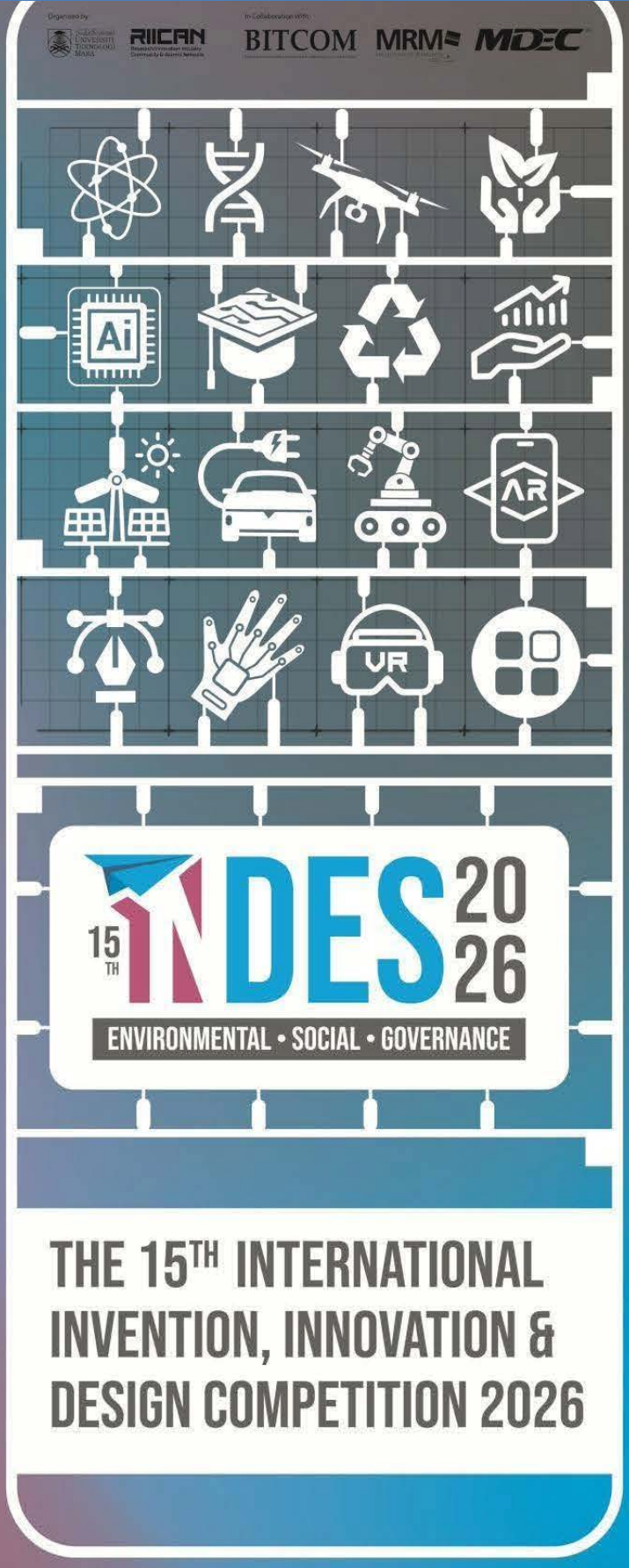


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THE 15th INTERNATIONAL
INVENTION, INNOVATION &
DESIGN COMPETITION 2026

Organized by:
Office of Research, Industry,
Community & Alumni Network
UiTM Perak Branch

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Unit Penerbitan UiTM Perak,
Universiti Teknologi MARA,
Perak Branch, 32610
Seri Iskandar Perak, Malaysia.

Perpustakaan Negara Malaysia Cataloguing in Publication Data

No e- ISBN 978-967-2776-67-3

Cover Design: Asrul Nizuan Ariffin

Typesetting : Georgia

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SANGKA KU RIANG:
A POSTDIGITAL MOSAIC CREATION MODEL FOR SUNDANESE FOLKLORE USING THE NIV-GC MMOE FRAMEWORK

Deden Maulana Anggakarti[1], I Made Gede Arimbawa[2],
Anak Agung Gde Bagus Udayana[3], I Wayan Sujana[4]

Univeritas Widyatama, Jalan Cikutra 204 Bandung, Indonesia, Institut Seni Indonesia Bali

deden.maulana@widyatama.ac.id, img.arimbawa@gmail.com,
bagusudayana@isi-dps.ac.id, wayansujana@isi-dps.ac.id

ABSTRACT

Sundanese folklore represents an important form of Indonesia's intangible cultural heritage, preserving cultural identity, philosophical values, and collective memory. However, the increasing dominance of digital media has reduced the relevance of conventional storytelling among younger generations, creating an urgent need for innovative approaches to cultural visualization. Although recent advances in Generative Artificial Intelligence (GenAI) have expanded opportunities for digital art creation and cultural heritage visualization, existing studies primarily emphasize technological implementation and visual outputs rather than systematic artistic creation methodologies. This study aims to formulate and implement the N–I–V–G–C–M–Mo–E (Narrative–Interpretation–Visualization–Generative–Curation–Mosaic–Motion–Evaluation) model as a postdigital mosaic creation framework based on Sundanese folklore. The research employed a Practice-Based Research (PBR) approach by integrating Gadamer's philosophical hermeneutics, Hutcheon's adaptation theory, and Cramer's postdigital aesthetics into an iterative creative process. The proposed model was implemented through the creation of the artwork SANGKA KU RIANG at Studio Mozi, West Java. The findings demonstrate that the integration of cultural interpretation, AI-assisted visual exploration, artistic curation, digital mosaic construction, and motion graphic development establishes a coherent methodology that preserves cultural authenticity while expanding contemporary visual expression. This study contributes a reproducible creative framework that positions artificial intelligence as a creative collaborator rather than an autonomous creator, extending the application of Practice-Based Research within postdigital visual communication and AI-assisted cultural heritage visualization.

Keyword: Practice-Based Research; Generative Artificial Intelligence; Postdigital Mosaic; Sundanese Folklore; Motion Graphic; Cultural Heritage.

1. INTRODUCTION

Folklore constitutes an important form of intangible cultural heritage that preserves collective memory, local wisdom, and cultural identity across generations. In West Java, Sundanese folklore embodies philosophical values, moral teachings, and socio-cultural perspectives that continue to shape community identity. However, the rapid expansion of digital media has fundamentally transformed how cultural narratives are consumed, particularly among younger generations. Conventional forms of storytelling are increasingly displaced by visually rich and interactive digital content, creating challenges for sustaining the relevance of folklore within contemporary visual culture. Consequently, cultural preservation requires innovative approaches that not only digitize cultural assets but also reinterpret them through creative media capable of engaging digital audiences while maintaining their cultural authenticity (Spennemann, 2024; Harmanda et al., 2026).

Recent advances in Generative Artificial Intelligence (GenAI) have introduced new opportunities for artistic creation by enabling computational image generation, visual exploration, and interactive design processes. Within cultural heritage studies, GenAI has been widely applied to digital reconstruction, virtual exhibitions, historical visualization, and creative content generation. Despite these

developments, existing research predominantly emphasizes technological implementation and visual outputs, whereas the artistic creation process itself remains insufficiently addressed. Most studies position AI as a production tool rather than as a collaborative component within an interpretative creative process. As a result, no comprehensive creation model has yet integrated cultural interpretation, generative AI, artistic curation, digital mosaic construction, and motion graphic development into a unified methodological framework.

Research on folklore adaptation similarly remains fragmented. Existing studies primarily investigate narrative transformation into digital illustration, animation, immersive media, or interactive storytelling. Although these approaches contribute significantly to cultural dissemination, they generally conclude at the stage of media production and provide limited explanation regarding how cultural meaning is interpreted, transformed into visual language, curated through artistic judgment, and subsequently reconstructed into postdigital visual compositions. This fragmentation indicates a significant research gap concerning the methodological integration of humanities-based interpretation and computational creativity within artistic practice.

Responding to this gap, this research proposes the N–I–V–G–C–M–Mo–E (Narrative–Interpretation–Visualization–Generative–Curation–Mosaic–Motion–Evaluation) model as a systematic framework for postdigital mosaic creation based on Sundanese folklore. The proposed model conceptualizes artistic creation as an iterative process beginning with narrative interpretation, continuing through AI-assisted visual exploration and artistic curation, followed by modular mosaic construction and motion graphic development, and concluding with reflective evaluation. Rather than treating AI as an autonomous creator, the framework positions it as a creative collaborator whose computational capabilities are guided by human interpretation, aesthetic judgment, and cultural understanding.

Accordingly, this study aims to formulate and implement the N–I–V–G–C–M–Mo–E model through a Practice-Based Research approach in the creation of postdigital mosaic artworks at Studio Mozi, West Java. The study contributes by introducing a reproducible creative methodology that integrates cultural interpretation, postdigital aesthetics, and generative artificial intelligence into a coherent artistic creation process. Beyond producing a visual artwork, the research seeks to establish a methodological framework that may support future developments in AI-assisted cultural heritage visualization and contemporary digital art practices.

2. METHODOLOGY

This research employed a Practice-Based Research (PBR) approach, which positions artistic practice as the primary method for generating new knowledge through the process of creative production. Within this approach, the artwork is regarded not merely as the final outcome but also as an epistemological contribution that reflects the interaction between conceptual inquiry, artistic experimentation, and critical reflection. Accordingly, the creation of postdigital mosaic artwork based on Sundanese folklore was conducted through iterative cycles of exploration, production, evaluation, and refinement, allowing artistic decisions to evolve throughout the creative process.

The theoretical framework integrates four complementary perspectives. First, Gadamer's philosophical hermeneutics provides the interpretative foundation for understanding the cultural meanings, symbols, and philosophical values embedded within Sundanese folklore. Rather than reproducing the original narrative literally, hermeneutic interpretation reconstructs cultural meanings that remain relevant within contemporary visual contexts. Second, Hutcheon's adaptation theory guides the transformation of folklore from verbal narratives into visual narratives while preserving their cultural identity through a different medium. Third, Cramer's postdigital aesthetics frames the interaction between human creativity and digital computation, positioning artificial intelligence as a creative collaborator rather than an autonomous creator. Finally, the Practice-Based Research framework integrates these theoretical perspectives into an artistic creation process that simultaneously produces visual artifacts and methodological knowledge.

Based on the integration of these theoretical foundations, this study formulates the N–I–V–G–C–M–Mo–E (Narrative–Interpretation–Visualization–Generative–Curation–Mosaic–Motion–Evaluation) model as the creative methodology. The model consists of eight iterative stages. Narrative identifies

folklore as the cultural source of ideas; Interpretation reconstructs meanings through hermeneutic analysis; Visualization translates interpreted meanings into visual concepts; Generative explores alternative compositions using generative artificial intelligence; Curation evaluates and selects visual outputs according to artistic and cultural considerations; Mosaic reconstructs selected images into modular postdigital mosaic compositions; Motion transforms the mosaic compositions into temporal visual narratives through motion graphics; and Evaluation critically reflects on the artistic process to refine both the artwork and the creative methodology. The iterative nature of the model allows feedback from each stage to inform previous and subsequent stages, ensuring coherence between cultural interpretation, computational exploration, and artistic expression.

The research was conducted at Studio Mozi, West Java, where the proposed methodology was implemented in the creation of the artwork entitled "SANGKA KU RIANG." The resulting creative process served not only to produce a postdigital artwork but also to validate the applicability of the proposed methodological framework for AI-assisted visualization of Sundanese cultural heritage.

PRACTICE-BASED RESEARCH

Hermeneutics	Adaptation	Postdigital
Gadamer	Hutcheon	Cramer

N–I–V–G–C–M–Mo–E CREATIVE MODEL

Postdigital Mosaic Artwork

"SANGKA KU RIANG"

3. FINDINGS

The implementation of the proposed **N–I–V–G–C–M–Mo–E** model demonstrates an iterative creative process that integrates cultural interpretation, computational exploration, artistic judgment, and postdigital visual construction into a coherent artistic methodology. Each stage contributes distinct functions while remaining interconnected throughout the creation of the artwork **SANGKA KU RIANG**.

The process began with the **Narrative (N)** stage, where the selected Sundanese folklore was examined as the primary cultural source. Rather than functioning solely as a storyline, the narrative was analyzed to identify philosophical values, symbolic elements, emotional structures, and visual potentials that could be transformed into contemporary visual language. The narrative therefore became the conceptual foundation of the entire creative process.

The identified cultural meanings were subsequently reconstructed through the **Interpretation (I)** stage using Gadamer's hermeneutic perspective. This process emphasized the dialogue between the historical meaning of the folklore and the contemporary cultural context, enabling traditional symbols to be reinterpreted into visual concepts without losing their cultural identity. Instead of reproducing folklore literally, interpretation generated new visual meanings that remained culturally authentic while responding to present-day visual communication.

The reconstructed meanings were translated into visual sketches during the **Visualization (V)** stage. Character proportions, gestures, composition, colour harmony, lighting, and spatial depth were developed as preliminary concepts before computational exploration. These visual concepts served as prompts and references for the subsequent generative process, ensuring that artificial intelligence operated within an artistically controlled framework rather than producing arbitrary visual outputs.

During the **Generative (G)** stage, generative artificial intelligence was employed to explore multiple visual alternatives based on the established artistic concepts. Various prompt engineering strategies were iteratively refined to produce visual compositions consistent with the intended postdigital mosaic aesthetics. Instead of selecting AI outputs directly, the resulting images underwent an extensive **Curation (C)** process, where visual quality, cultural representation, stylistic consistency, compositional balance, and symbolic accuracy were critically evaluated. This stage positioned the artist as the principal decision-maker while AI functioned as a computational collaborator.

Selected visual compositions were reconstructed through the **Mosaic (M)** stage by transforming images into modular tesserae structures characteristic of postdigital mosaic aesthetics. Fragmentation, geometric reconstruction, colour segmentation, and layered visual textures collectively generated a distinctive visual identity that differentiated the artwork from conventional digital illustration. The mosaic composition subsequently evolved into the **Motion (Mo)** stage, where camera movement, temporal sequencing, visual transitions, and cinematic animation transformed static images into dynamic visual narratives. Motion graphics enabled the reconstructed folklore to communicate cultural meanings through temporal experience rather than through static representation alone.

The creative process concluded with the **Evaluation (E)** stage. Continuous reflection was conducted throughout every iteration to assess conceptual coherence, cultural authenticity, visual aesthetics, computational performance, and narrative communication. Evaluation was therefore not positioned as the final step only, but as a recursive mechanism allowing refinement across all previous stages. This iterative characteristic demonstrates that the proposed methodology functions as a cyclic creative system rather than a linear production workflow.

The implementation of the **N–I–V–G–C–M–Mo–E** model resulted in the creation of the postdigital artwork **SANGKA KU RIANG**, which combines Sundanese folklore, computational creativity, modular mosaic aesthetics, and cinematic motion graphics into an integrated visual communication system. Beyond producing an artistic artifact, the findings demonstrate that the proposed model successfully establishes a reproducible methodology capable of integrating humanities, computational intelligence, and artistic practice within the framework of Practice-Based Research.

4. CONCLUSION

This study successfully formulates and implements the N–I–V–G–C–M–Mo–E (Narrative–Interpretation–Visualization–Generative–Curation–Mosaic–Motion–Evaluation) model as a systematic methodology for postdigital mosaic creation based on Sundanese folklore through a Practice-Based Research approach. The proposed model integrates cultural interpretation, generative artificial intelligence, artistic curation, modular mosaic construction, and motion graphic development into an iterative creative framework. The implementation demonstrates that artificial intelligence functions most effectively as a creative collaborator, while cultural interpretation and aesthetic judgment remain under the responsibility of the artist.

Beyond producing the artwork SANGKA KU RIANG, this research contributes a reproducible methodological framework for AI-assisted cultural heritage visualization. The proposed model expands the application of Practice-Based Research by bridging humanities, computational creativity, and postdigital visual communication within a unified artistic creation process. Future studies may further evaluate the applicability of the N–I–V–G–C–M–Mo–E model to other forms of intangible cultural heritage and emerging AI technologies, thereby supporting broader innovation in digital cultural preservation and contemporary creative practice.

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E-BOOK OF EXTENDED ABSTRACT THE 15th INTERNATIONAL INVENTION, INNOVATION & DESIGN COMPETITION 2026

eISBN 978-967-2776-67-3

9 789672 776673

Date of Publication: 13 July 2026

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(online)