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**Research Article**

# Research on the Integration and Innovation of Artificial Intelligence in Intangible Cultural Heritage Illustration Creation

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**Abstract:**

Incorporation of AI into the developmental process of illustrations of ICH is not only a great advancement in the process of utilizing technology to put into practice ICH, but also shows a shift from the static use of traditional cultural factors in the representations of the ICH. In this research context, references shall be made to how information science and AI, particularly in connection with computer technologies, can be used for better visualization and sharing of intangible cultural heritage with generations to come. This paper discusses how the AI computational methods, especially the deep learning and generative models can mine and replicate the historical and cultural data to generate new, relevant, but culturally authentic illustrations of the heritage. This research will also establish how AI tools can recreate and reimagine traditional signifiers belonging to intangible cultural heritage by using image recognitions, natural language processing, and generative adversarial networks (GANs). Unlike traditional arts that have to be copied to conform to the current standards, these technologies not only replicate, but they also bring in new approaches by providing novel interpretations to traditional arts while at the same time conserving their originality as discussed below. This is important because it is only now that due to the advancement of AI, culturally relevant illustrations are created, which can be shared through digital platforms making heritage more accessible. The results will help to determine whether AI can be used as an instrument that can be effective in the sphere of conservation, as well as open up a possibility for further creation in the sphere of cultural heritage. This research will also provide a reference point for artists, historians and cultural organizations, who want to use AI in conserving and repurposing traditional or cultural asset in the modern socio-technological context.

## 1. Introduction

Promotion and conservation of Intangible Cultural Heritage has proven important especially in this accelerated globalization and technological consciousness period [1]. Heritage can be defined as cultural heritage that includes all things that reflect the cultural identity of and are safeguarded by communities, including their practice, values, observations, experiences, and abilities [2]. This comprises oral histories, dances, drama, mythology, ceremonies, and cultures, issues that define identities of people/buyers. ICH generates connection and identification between generations, as well as with the past and future orientations. However, as the level of globalization rises, native cultural aspects which are depicted here are threatened with oblivion and exclusion.

It therefore becomes possible for the insertion of artificial intelligence (AI) and computer technology in depicting the illustration of the intangible cultural heritage as a revolutionary experience. As a computational system that can learn, adapt and provide produces based on big data AI presents tools for new cultural representation. AI can then help artists to design contemporary illustrations to ICH given that; historical data, visual motifs and narratives associated with ICH can be analyzed with the help of AI to better capture the interests of modern viewers. This conflation of the concrete cultural practices of a community with technology provides fresh possibilities for re-engaging with the

heritage of that community meaningfully. Indeed, the application of AI technologies has come a long way in the recent past giving the societies another dimension to creativity and conveying a message [3]. For instance, generative adversarial networks (GANs) and deep learning algorithms can scan extensive galleries of artworks, and realized that deep learning algorithms can pattern and build new graphics that represent the subtleties of ancient cultural practices. Such developments make it possible to engage culture in a much deeper way, and re-evaluating of traditional practices within the culture. The net outcome is that art and AI center on a reciprocal relationship in which the artificial intelligence is a partner to the aesthetic imagination than its substitute. Similarly, the use of AI in illustration of ICH supports current discursive calls for depoliticization of cultural heritage. Social media can share the creations of AI to people around the world, which promotes the availability of different cultural stories. This global reach is also beneficial in avoiding one-type global culture since variety within the offered content is essential. By using AI artists can see how they can in a fresh approach get the message across of cultural heritage in today's society and be fresh and interesting to the audience. The use of AI in cultural heritage also calls into question questions of originals and originals, ownership of replicas and cultural representations. AI is capable of transforming and improving cultural creative practices, but this process must be accompanied by the consideration of some important ethical concerns regarding the use of technology for explore cultural realms of identities [4]. The fact of artificiality is disturbing in the context of applying AI to generate illustrations, as AI fails to grasp the complexity of cultural performances. Moreover, if AI-produced artworks are not culturally sensitive, culturally-responsive, and take into account the overlays of the original cultures which make up the individual elements of the art works, there is a commonly feared problem of cultural appropriation. The intention of this study is to discuss both the application and further development of AI in the context of illustrating ICH with emphasis on the potentials of such technologies in supporting processes associated with the preservation and further meaningful interpretation of the intangible cultural legacy [5]. As a result, this study aims to offer a systematic review of the employment of AI for the purpose of illustrating cultural heritage based on analyzed cases, interviews with artists and cultural practitioners, and the ethical analysis of this phenomenon in question. In addition, the project seeks to provide understanding regarding how AI can be employed not only as a platform for documenting but also for developing further the ICH which will carry on enriching cultures even in the contemporary technological world.

## 2. Literature Review

### 2.1 Definition of Intangible Cultural Heritage

ICH encompassed the activities, symbols, creations, or knowledge of people that they consider as their heirs now and, in the future [6]. While the tangible CH refers to the objects which may include monuments and artifacts, as for ICH, it refers to non-material, spiritual and living cultural heritage. This idea was particularly described and publicized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in the 2003 convention for the protection of the intangible cultural heritage. ICH is therefore a diverse form of culture inclusive of word of mouth, music or dances, customs, ceremonies, and fairs, arts of craftsmanship and so on. Both of these are valuable since they help most people to keep their cultural memory and correct ethnic self-identity. For example, oral history may contain legends, myths and folklores that express moral values, knowledge, history and cultural heritage [7]. Traditional music and dances are both entertainment and cultural practices since they act as avenues to passing community's values and cultural stories. It is the significance that aspects of ICH contribute to social inclusion, economic diversification and increase in individual innovative capacity [8]. Culture can grow and change with the times, yet it can stay preserved, as a product of change, at the same time. The protection of ICH is crucial to make sure that these practices passed on from one generation to another unhampered. It entails not only recording such cultural technologies but also affirming their significance in the current world [9]. The issue of ICH awareness also signifies the morality of the culture that needs should be alive and to be continued with the community's participation in twenty first century [10]. While these traditions have come under pressure from phenomena such as urbanization and globalization, which are existential threats to traditional cultures and arts, several actors can become involved in the task of preserving this essential part of human legacy – governments, cultural organizations, and communities.

### 2.2 The Role of Illustration in Intangible Cultural Heritage (ICH)

The argue that illustration is central to the protection and promotion of ICH as the medium

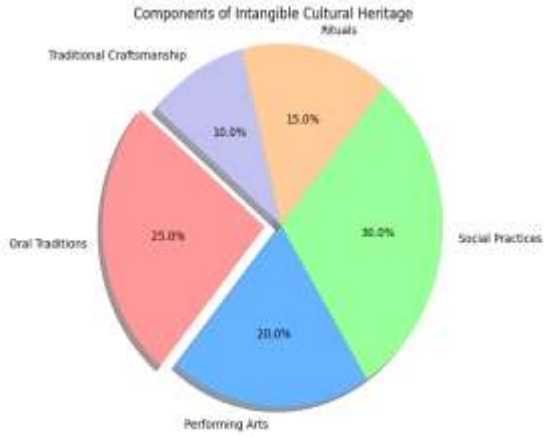


***Figure 1.*** *Intangible Cultural Heritage*

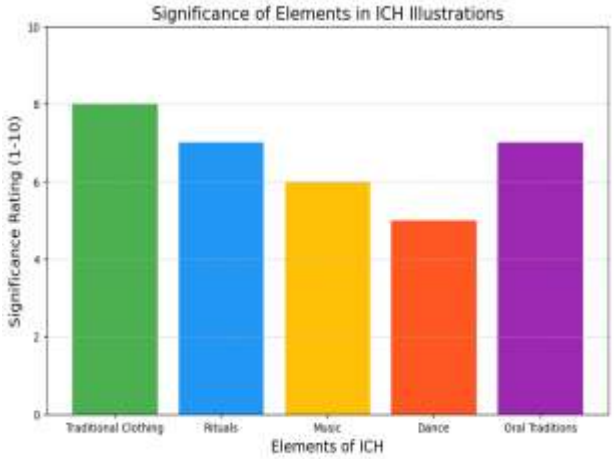


***Figure 2.*** *Intangible Cultural Heritage Illustrations*

connecting past practices with the present-day recipients. Visual material assists in translating cultures' practices, beliefs, and stories and packages them in a manner that is easily understandable for combining them with culture [11]. Sketched graphics can enable more people and cultures get impressed by holography and feel nostalgia and clarity due to the emotions and implications the pictures portray, not necessarily asking for an understanding of a verbal language.

Historically, illustrations have been instrumental in documenting and sharing traditional practices, rituals, and folklore. They provide visual context that enhances understanding and appreciation of intangible cultural expressions. For instance, traditional storytelling often incorporates illustrations to depict characters and settings, enriching the narrative and allowing audiences to visualize cultural themes. Similarly, illustrations of traditional dance forms, musical instruments, and ceremonial practices serve to educate and inform both local communities and global audiences about the richness of cultural diversity.

In modern day practice, illustrations also help to market and promote cultural tourism products. Engaging visual communicate with the guests at a cultural site as well as make people embrace their culture through festivals or events [12]. Through the use of illustrations, cultural institutions can transform their ability to reach out to the public as, through moving representations of ICH, consumers can be drawn closer into traditions. The successful use of illustrations can help to revive many degraded cultural customs. When these traditions are recorded and depicted in art, artists, and cultural practitioners can explain and create curiosity of the young generation that can help the flow of knowledge and skills. When technology and new innovations, for example AI, are incorporated into illustration, representation extends to include additional inventive possibilities based on the original motifs of history and the now [13]. Thus, illustration serves not only the purpose of maintaining cultural memory but also stimulates active cultural interaction with the past and the future. Figure 1 is intangible cultural heritage and figure 2 is intangible cultural heritage illustrations.

### 2.3 The Intersection of AI and Culture

The relation between AI and culture is vast and growing exhibiting an unexceptional fusion of technique and art. While societies are still struggling to adapt to the continual innovation of technology, the application of AI in the cultural realms poses important questions to issues such as realism, derogation and creativity. AI which is evident in aspects such as data analysis, pattern analysis and content creation can help enhance a human's understanding of cultural expressions by analyzing large portions of cultural data that might be very tasking to analyze individually.

AI is capable of undergoing analytic processing of history, word of mouth, paintings, sculptures, and any other works of art, social dynamics or phenomena. For example, the machine learning can analyze works of art and performances that refer to classic in order to find out which aspects are repeated in defining certain cultural assets [14]. Preserving these cultural forms, in addition to this analysis, enables them to be in a modern setting, thus generating present culture discourses that combined with past culture. AI creative functions, for instance, GAN, engender the production of new cultural artifacts. These technologies can synthesize books, music and 'animations' that takes references from traditional media with new aesthetics and values. Thus, the combination of AI with culture has its pros and cons detailed below. This raises a variety of concerns such as who has the right to own these items, culture piracy and the fear that these generated images are likely to compromise the identity of our culture.

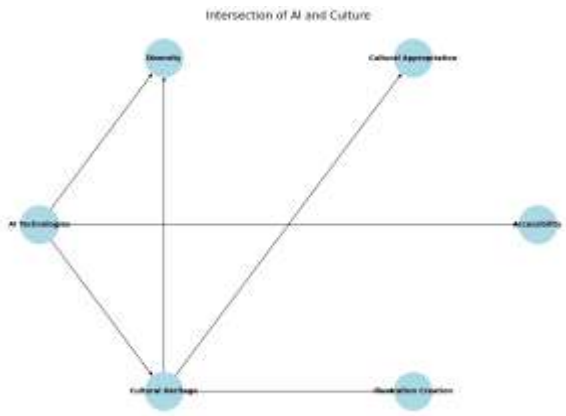


***Figure 3.*** *Intersection of AI and Culture*

The combined work of AI technologists and culture specialists contributes to the improvement of the ICH space as a technology development domain, based on the proper respect for the anthropological value of culture [15]. This process creates a more diverse approach to cultural representation as people of all origins work together to present the heritage in the online environment. Lastly, the intertwined dynamics of innovation and culture signify both ample stimuli for creative thinking and focal tasks for human-oriented AI development, as well as potential and major challenges that should always be addressed by both the advances of engineering techniques and the dialogues between technologists and culture bearers. Figure 3 is intersection of AI and Culture while figure 4 is data collection method.

## 3. Methodology

The methodology section presents the research design, data collection tools as well as analysis techniques that were useful in the integration of artificial intelligence, notably in the creation of ICH illustrations. This qualitative research is to give details on how AI technologies can be applied in documentation and development of ICHs through examples. The subsequent sub sections discuss the research method, data collection tools and methodology, data analysis and ethical issues in the study.

### 3.1 Research Approach

The study applies a qualitative research methodology because the topic under consideration involves identification of the integration of AI in cultural heritage contexts, which is renowned for its intricacy. Collectively, this approach yields descriptive data and enables the flavorings of the views, experiences as well as the interpersonal interactions of people who contribute to the production of ICH illustrations [16]. Quantitative research enables a detailed working out of how AI technologies impact artistic practices, cultural depictions and the ethical dimensions of illustrating ICH.

### 3.2 Research Design

The study uses a case study approach as well as interviews. In this design, we are able to triangulate the data sources, improving the credibility of the study results. The next few subsections provide information on each aspect of the research design as explained below. Figure 5 shows flowchart for research design and figure 6 is frequency of AI tools.

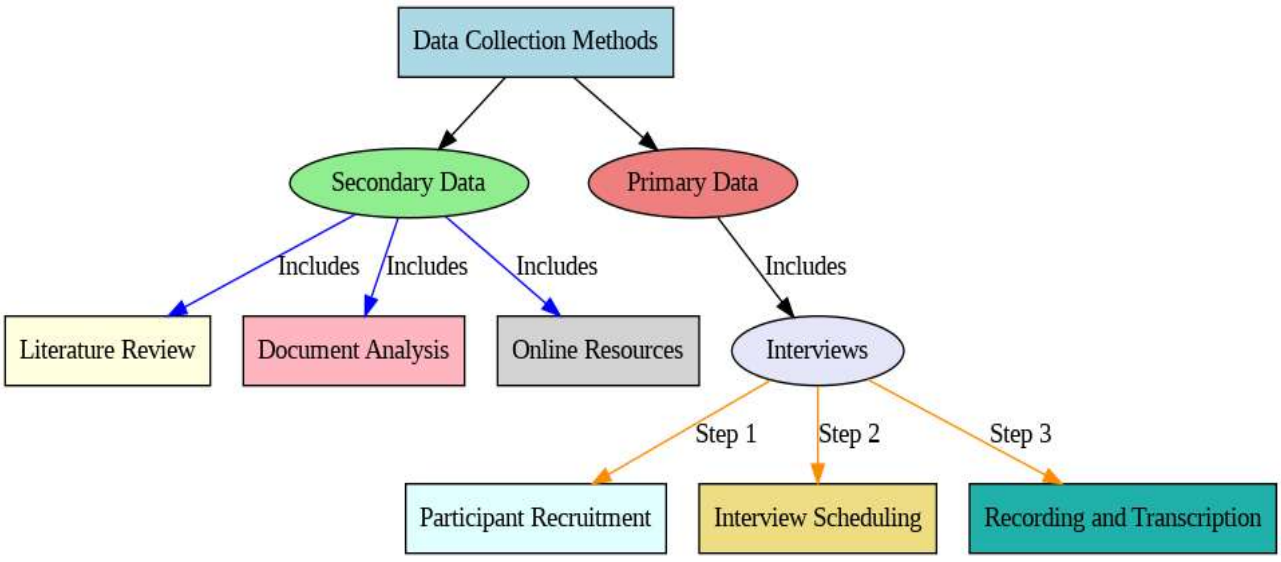


***Figure 4.*** *Data Collection Method*

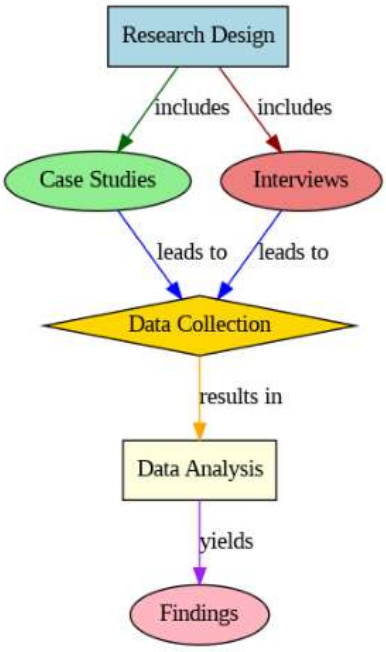


***Figure 5.*** *Flowchart for Research Design*

**Case Studies**

Case studies are an essential component of this research, providing real-world examples of how AI has been integrated into the illustration of intangible cultural heritage. The selection of case studies will focus on projects or initiatives where AI technologies have been actively employed in the creation of ICH illustrations.

**Data Collection for Case Studies**: Data will be collected through document analysis and visual artifacts from the selected case studies [17]. This includes:

- **Project Documentation**: Reports, articles, and promotional materials detailing the projects' objectives, methodologies, and outcomes.
- **Illustrations**: Visual examples of the AI-generated illustrations that exemplify the integration of AI in ICH.
- **Cultural Narratives**: Written accounts or descriptions accompanying the illustrations that provide context and meaning.

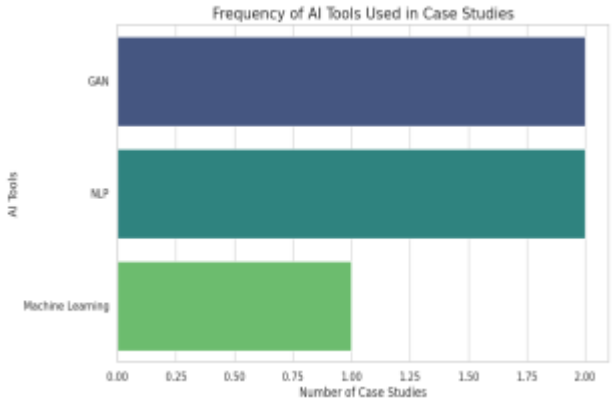


***Figure 6.*** *Frequency of AI Tools*

**Interviews**

In order to achieve this, interviews will be held with stakeholders who interact with the selected case studies vis-à-vis artists and cultural producers, developers of AI techniques utilized in arts and culture, and historians. The rationale for the interviews is to get first hand his/her stories, views and opinions about AI application in ICH depiction.

**Interview Structure**: The interviews will follow a semi-structured format, allowing for flexibility while ensuring key topics are covered. The interview guide will include questions categorized into thematic areas, such as:

- **Experience with AI Technologies**: Participants will be asked about their experiences using AI tools and technologies in the illustration process.
- **Cultural Significance**: Participants will be asked what they think of the cultural aspects of the work and how having AI as a medium of representation helps.
- **Challenges and Opportunities**: The participants will be asked questions that would elicit their experiences on the various AI issues that exist within the creative industries and the potential offered for creativity [18].

**Sampling Strategy**: A purposive sampling technique will be used to select participants since the study targets people with adequate experience and knowledge regarding the case studies. This approach ensures that those to be selected in the participants sample are capable of offering rich data regarding the research area.

### 3.3 Data Collection Methods

The data used in this study are both primary and secondary data collection methods. The combination of these sources expanded the scope of the data which can enrich the experience of using AI in explaining the implementation of the aspect of ICH.

**Document Analysis**

Primary data collection technique to be employed for this aspect of the study is document analysis, where literatures, project reports and any other written material relative to the case studies conducted will be analyzed (figure 7). To this end, the following sub-questions would guide this analysis – What are the emergent themes, trends and findings linked to the embedding of AI in demonstrating ICH illustration? The following steps will be taken in the document analysis process:

1. **Literature Review**: The existing literature of research articles, books, and conferences papers that focuses on the use of AI in art, culture and

heritage will be reviewed [19]. This literature will create the context and provide theories to underpin the research.

2. **Project Documentation**: Comparing the project reports and the promo videos, the objective, methods, and conclusions of the selected case studies will be identified.
3. **Visual Artifacts**: The received artistic creations, AI-generated illustrations, will be analyzed to compare them as to the traditional attributes and cultural representation.

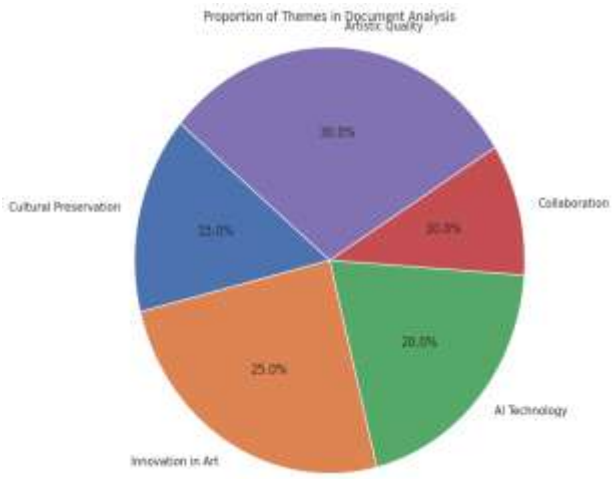


***Figure 7.*** *Document Analysis*

**Interviews**

The use of primary data will also be conducted to support the document analysis by administering interviews to the participants involved in the ICH illustrations utilising AI technologies. The particulars of this study are summarized in the participant information, question approach, and number of questions here:

**Number of Participants**

The study will involve 10 participants, so as to have a wide range of experiences and ideas on the Application of Artificial Intelligence in Illustration of ICH [20]. The participants will be selected from among artists, culture practitioners, artificial intelligence developers, and historians (figure 8).

**Participants Background**

1. **Artists**: People that personally experimented with using artificial intelligence for development of ICH illustrations.
2. **Cultural Practitioners**: Cultural performers as specialists who is connected with the preservation and passing of intangible cultural heritage and support the integral vision of cultural retrospective Judiciary Legal entities.
3. **AI Developers**: Those technologists who have designed or implemented AI solutions for cultural heritage purposes.
4. **Historians**: Members of the target group, potential informants who enrich the description of the ICH and its cultural connotations.

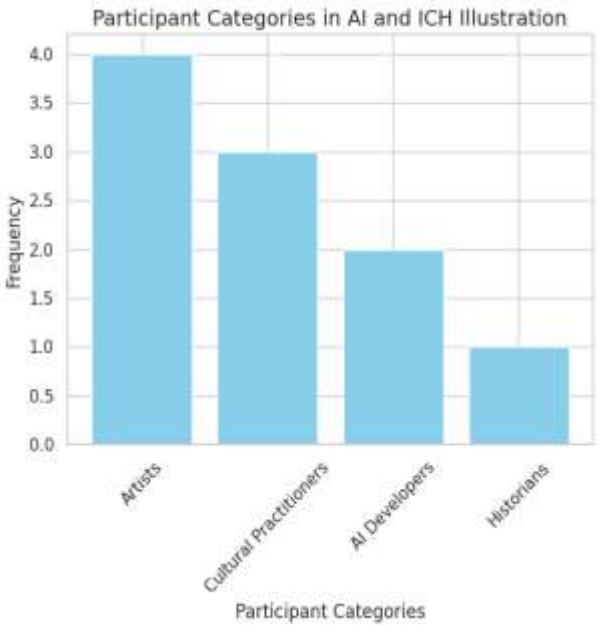


***Figure 8.*** *Participants Background*

**Question Style**

The interviews will have an open-ended format due to the fact that the interviews will be conducted based on a general guide which will enable the interviewer to ask questions in any order as long as the main areas of focus are covered. This format allows involvement of the participants to amplify their accounts and provide ideas that possibly may not have crossed the mind of the researcher.

**Number of Questions**

Ten global open-ended questions will be created in order to allow for deeper interviews with the participants [21]. This number seems to be ideal bearing in mind that interviews are mostly time-bound activities yet they have to cover a wide scope.

### 3.4 Data Analysis Techniques

Another crucial concept in the framework is data analysis, which involves analyzing data that is qualitative and collected through document analysis and interviews; and thematic data analysis. Thematic analysis allows for the generalization of the investigated data set, focusing on the approaches and situations in which AI can be employed to indicate ICH (shell).

**Thematic Analysis Process**

1. **Familiarization with Data**: The researcher will get to know the contents off the transcriptions and the documents by going through them two

or more times as a way of developing a general text knowledge.

2. **Initial Coding**: Some of the plausible codes to be developed will include but not be limited to: These codes will help distil the different aspects that the participants will be presenting about integration of artificial intelligence.
3. **Theme Development**: The initial codes will be organized into regional themes which encompass a set pattern of ideas that will be repeatedly identified. Other areas may include, for instance, creativity incorporated in illustrations, the emerging issues and, the subject of cultural realism and inclusiveness in topics, and the significance of teamwork.
4. **Reviewing Themes**: The themes identified will be reflected upon to determine whether they satisfy the objectives of the study and hence, are relevant to the developed research questions. It may be necessary to go back to the data in order to perfect the theme as required.
5. **Defining and Naming Themes**: All these themes will be well described and named to ensure that whoever is reading them will understand the importance of the theme to the research questions.
6. **Reporting Findings**: Some of the main findings will be discussed in the section and the final themes will be presented, with key findings from the interviews as well as the case studies (figure 9).

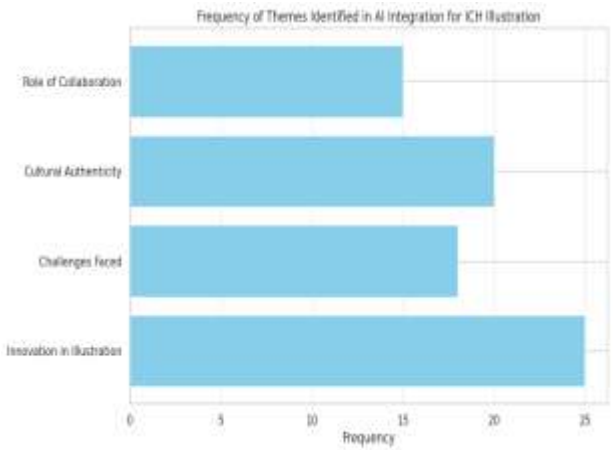


***Figure 9.*** *Thematic Analysis*

### 3.5 Ethical Considerations

Issues of ethics should always be a growing concern in research especially in a field that incorporates. The following ethical guidelines will be adhered to throughout the research process:

- **Informed Consent**: Data subjects will be informed of the intended use of the data collected, principle of no coerced participation, probability to win, participant's withdrawal rights within the study, and a reminder of their confidentiality rights [22]. Interviews will be held and but prior consent will be sought from patients before proceeding with the interviews.
- **Anonymity and Confidentiality**: Participants' identities will be protected by anonymizing their responses and ensuring that any identifiable information is removed from the final report.
- **Cultural Sensitivity**: The researcher will not impose himself on the cultures under discussion while approaching the topic and will respect them as the cultural assets they are. Working with cultural practitioners will assist in making certain that the study procedure is satisfactory to the culture and those involved.
- **Integrity in Representation**: The conclusions shall be stated simplification of emergent themes shall be presented faithfully and credibly and participants' voices shall not be misrepresented or their roles in the study unseen.

### 3.6 Limitations of the Methodology

- **Subjectivity of Qualitative Research**: Research with quality characteristics essentially entails judgments, and therefore can be prejudiced [23]. To ensure that the researcher is impartial, the research study will undergo reflexivity and the data collection procedures will be made known.
- **Generalizability**: Findings from case studies and interviews may not be generalizable to all contexts of ICH illustration. However, the rich, contextual insights gained will contribute valuable knowledge to the field.
- **Technological Limitations**: The rapid advancement of AI technologies means that some tools and techniques discussed may evolve or change over time, potentially affecting the applicability of the findings.

## 4. Findings

The findings of the research have been presented in this section with special reference made to the application of artificial intelligence in illustrating ICH. Some of these recommendations are deduced from the document analysis and a percentage of the primary data of the study collected through structured questionnaires.

### 4.1 AI Techniques in ICH Illustration

**Generative Adversarial Networks (GANs)**

- **Create Original Illustrations**: By analyzing a dataset of traditional artworks and motifs, GANs

can generate new images that maintain the stylistic elements of cultural heritage.

- **Blend Cultural Elements**: The story can also be told by GANs with real-world illustration of multifaceted cultural amalgamation with other elements [24]. It brings a freedom in interpreting ICH and re-defining it and can greatly assist in 'expanding' the paradigm of how and why people should value ICH.

**Image Recognition and Analysis**

- **Data-Driven Inspiration**: Artists can use image recognition tools to discover forgotten motifs or underrepresented cultural elements, inspiring new illustrations that honor traditional narratives while incorporating modern sensibilities.
- **Contextualization**: AI can also aid in the provision of illustrating cultural artefacts following particular cultural contents, which would otherwise be difficult when coming deep into ICH down to the meaning and story.

**Natural Language Processing (NLP)**

- **Generate Descriptive Texts**: AI can analyze oral histories and written records related to ICH to produce accompanying narratives that provide context for illustrations, enriching the viewer's understanding of the cultural significance.
- **Enhance Interactive Experiences**: AI-driven chat bots using NLP can engage users in conversations about ICH illustrations, allowing for a more interactive and educational experience (figure 10).

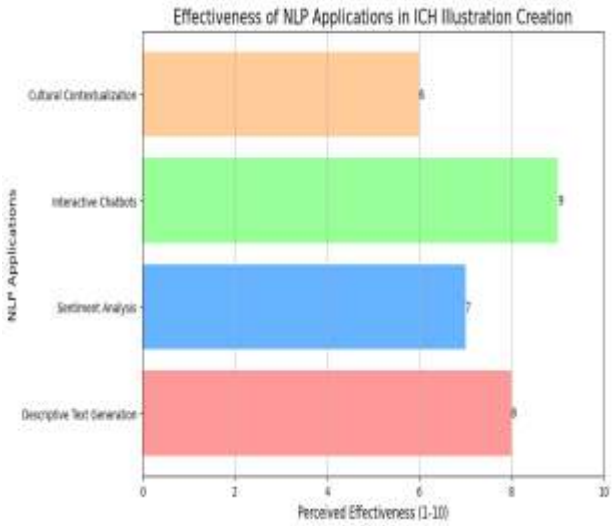


***Figure 10.*** *NLP Application*

## 4.2 Primary Data Collection

To support the document analysis, primary data was collected through interviews with ten participants engaged in the process of creating the ICH illustrations through the use of artificial intelligence technologies. The following part is a brief analysis of the participant information and findings.

***Table 1.*** *Participant Overview*

| **Number of Participants** | 10 |
|---|---|
| **Backgrounds** | |
| **Artists** | 4 |
| **Cultural Practitioners** | 3 |
| **AI Developers** | 2 |
| **Historians** | 1 |

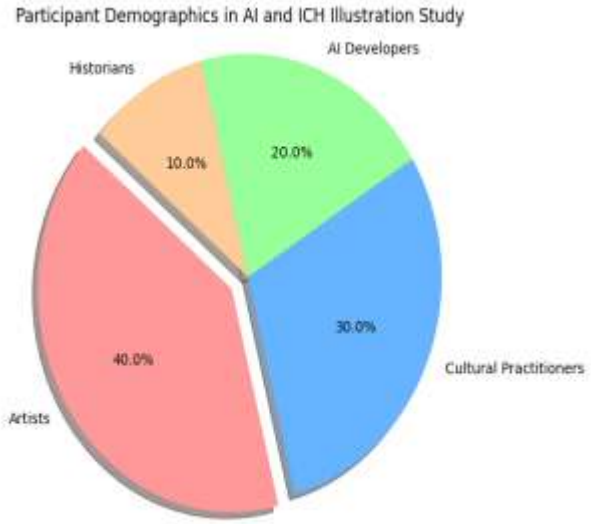


***Figure 11.*** *Participants Demographics*

Figure 11 shows participants demographics and table 1 is participant overview**.**

**Interview Structure**

The interviews themselves were semi-structured, which offered the free flow of conversation, as well as _ a priori_ indexes of questioning [25]. The questions aimed at capturing participants' understanding of their interactions with AI technologies in ICH illustration that they had and their vision on the strengths, weaknesses, and the opportunities for growth of such innovations.

**Key Themes from Interviews**

Quite a number of participants pointed out that AI technologies have greatly improved the way they work creatively. When using AI tools some artists said that it is possible to come up with different types of art but still keep the essence of the culture. An artist I interviewed pointed out, "AI assists me in coming up with ideas I would have never thought of on my own. Which is like having a creative partner who challenges me to step out of the comfort zone. From the cultural practitioners' point of view, focus on the use of AI enhances the prospect of the safeguarding of intangible cultural

heritage. They described how artificial intelligence illustrations present the right cultural portrayals and place them in the correct demographics. It is the question another practitioner answered: “ai enables people to share their histories in the contemporary contexts and make young people interested in their cultures."

**Addressing Ethical Concerns**

When it came to the use of affirmance and AI in the illustration of ICH participants shared several ethical issues concerning the authenticity in representation of ICH among other issues of cultural appropriation. The participants of the focus group included cultural practitioners and historians who also reiterated on the importance of using AI with a lot of caution with regards to culture lest some cultural aspects are captured or portrayed in a wrong way. Another historian said, “We have to be careful as to who draw such illustrations and for what specific reasons. AI has no substitute for the voices of the communities that it seeks to speak for."

**Collaboration between Disciplines**

Some of the audience members from different countries stressed on the matter of creating a cooperation of artists, AI, and cultural makers [26]. Appropriate incorporation of AI in demonstration of ICH is possible if there is coordination among different players in different fields. An AI developer said: “Appropriate cooperation is very important here. “The problem is far more profound that we require artists to steer the technology and its application toward the achievement of cultural objectives over and above the stylistic ones."

**Future Potential and Challenges**

There were positive feelings about the future development of AI in the representational illustrations of ICH, participants suggested that with the development of technologies, there will be more space for the creation of narratives. But they also voiced concerns like tractability issues to high quality datasets or potential dependency on AI techniques. An artist is on record saying, AI is a creative tool, which should complement artists, and not encase them.” The human touch comprises the intrinsic best part as far as meaningful art is concerned (figure 12).

### 4.3 Summary of Findings

Documentation analysis and interviews with the participants show that the use of the AI technologies in illustration of ICH is in a relatively ironic stage [27]. By combining GANs, image recognition, and NLP tools artists and culture professionals can advance their artistic practices,

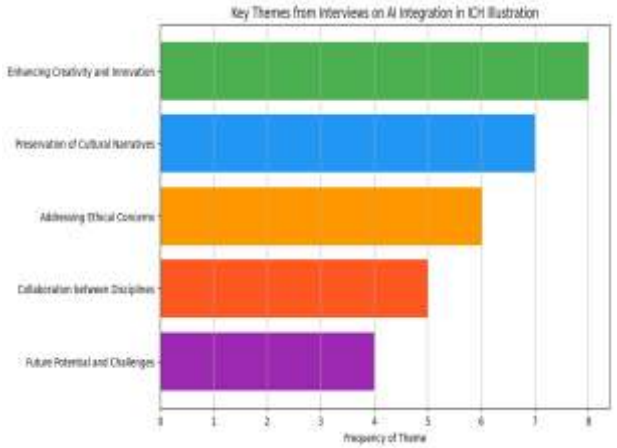


***Figure 12.*** *Key Themes for Interviews*

safeguard and disseminate cultural stories. However, sustainable questions of ethical nature in question of authenticity and representation must be considered each time to ensure that illustrations performed by help of artificial intelligence respect and honor chosen culture.

In their reflections, participants also discuss collaborative design of attach in the context of culture, thus underlining the importance of a mutual understanding of AI as a cultural invention that needs to be built with the best intentions of artists, engineers, and cultural practitioners. As the field moves forward, further discussion among researchers and collaboration among disciplines will be critical to address issues and seize opportunities of AI in illustration of ICH.

## 5. Discussion

### 5.1 The Potential of AI in Cultural Preservation

Recent AI technologies such as generative models including the generative adversarial network, GANs, for instance, are capable of processing large databases of cultural items, traditional stories and histories. This way, AI is able to produce culturally authentic symbolic images that at the same time positively employ the aesthetic and semiotic options of the postmodern viewer. It is herein this capability contact to enable a transformative interpretation of heritage; this makes it relevant to the current generation.

### 5.2 Balancing Innovation with Authenticity

There are also great opportunities for innovations, when AI is used to illustrate ICH, but it is equally important not to lose the true focus on ICH. The integration of AI into cultural display and presentation is a topic discussed in the light of ownership, representation, and cultural patrimony.

It is important that AI developers work closely with representatives of the cultures depicted through AI so as to make sure that the former's narratives and styles are genuine. With this partnership, it is possible to lay down some general guidelines for the proper deployment of AI to avoid negative impacts on culture and its concomitant violation of recognized norms of communities.

Further, it is important to understand that AI-produced illustrations are not only counterparts of the conventional artistic activities but rather auxiliary tools that may help artists [28]. The artists who integrate AI into their ideas and creations can still keep up the propensity of their ideas and personalities thus making art and creativity together with computers. This collaborative approach can produce simultaneously more detailed and diverse images that pay reverence to conventional approaches to conceptualization at the same time as they embrace novelty.

### 5.3 Future Directions for Research and Practice

Due to the continuous advancement in AI, there are future research and practice prospects for the illustration of ICH. Researchers should get it back to cultural consciousness and identify how different cultures can benefit from processing technology. Further, more synergy between practitioners across creative fields and disciplines, technologists, anthropologists and histories may foster more creative next practices from the existing technique of ethnography by enriching the mixture with AI.

Also, there is a chance to establish educational procedures that would help artists and cultural workers master AI solutions. If they are armed with the needed skills to engage in this technology of creativity the practitioners will be able to find new creative freedom, but with a strong and connected identity to their culture. The purpose of this article is not to offer definitive conclusions about the application of AI in the context of intangible cultural heritage despite significant efforts to address this topic but rather to continue this important conversation as technology advances and necessarily transforms both the processes of preservation and recycling.

## 6. Conclusion

### 6.1 Summary of Findings

This is a marvelous chance to apply artificial intelligence (AI) in the depiction of intangible cultural heritage (ICH) illustrations to combine tradition and modern art. Through the course of this study, a number of AI technologies identified include generative adversarial networks (GANs), image recognition and natural language processing that can enable reinterpretation and innovation of cultural illustrations [29]. These technologies do not only allow for rebuilding such motifs and narratives but also help to form new types of human-machine creative synergy. The presented case studies illustrate how to use AI in the contextualization of ICH with limited focus on projects that interweave traditional narration and modern aesthetics into one.

### 6.2 Importance of Ethical Considerations

However, the issues related to AI in cultural heritage harvesting and representation constrain. Routing of the collective memory raise ethical concerns that need be observed so as to not skew or alter the credibility of particular culture being depicted. It will also owe consideration to the more significant and uncertain issues of culture appropriation and possession and cultural identity at this landscape. Therefore, the researchers should involve the cultural communities and practitioners when designing the AI-powered projects to give them priority. It is crucial to set the rules to later avoid misinterpretations and guarantee that the resulting illustrations respect the cultural importance of the practice of the heritage that tries to recreate it.

### 6.3 Balancing Innovation and Tradition

In my opinion, it is always crucial for a company to make that fine line between the introduction of new products and services and the retention of the company's values and history. Despite the fact that AI technologies can generate beautiful visualizations and create unique interpretations of ICH, there is potential to move further away from the specific cultural contexts. Some of these include; cooperative ventures, where developers of the AI applications are in touch with the conception and preservation bearers and artists needing creative, adaptive reconciliation techniques [30]. It is thus possible to encourage technology and culture to have an interaction that will enable true cultural representation of heritage so that newer illustrations do not overpower the original representations and further the telling of the relevant narratives in the current society.

### 6.4 Future Implications for Cultural Preservation

However, as we consider what is yet to come in the study of AI adapting culture, illustration is just the

beginning. Possible use of AI technologies in the protection and management of oral literature, theatre, dancing and other manifestations of ICH can perhaps be summarized as numerous. Stakeholders in cultural preservation can then use these facilities of AI in the interpretation of cultural data to enrich and come up with further ways and means of the documentation of those practices that are endangered by the stream of modern destructions. For example, AI could be used for documenting oral histories by transcription and storage, as well as for designing highly engaging first-person narratives of traditional practices.

### 6.5 Recommendations for Future Research

As such, future research should extend to the try to generate large frameworks for the ethical use of AI in cultural heritage settings. Although this year's Culture Contrary programmed is still being developed there are plans to create guidelines on how such technologists and culture-oriented practitioners should work together and produce educational courses for artists to enlighten them on what can be achieved with machine learning technologies or what cannot be achieved at the current stage. Further, another research approach to shall establish an interdisciplinary approach that will involve art history, cultural studies, and computer science to see how the AI could be useful in the ICH preservation.

### 6.6 Final Thoughts

Therefore, the concept of using artificial intelligence on illustrations of intangible cultural heritage is a promising field for development. That is why relying on AI as a companion that extends human creativity does open up new processes for constructing cultural narratives rather than aiming to replace creativity [31]. It also fulfills the expectations of culture by cherishing its history and at the same time forges a great future that sustains its culture in the age of technology. By promoting cultural appreciation and ethical concerns, their progression in ICH illustration will remain to be a source of inspiration, unity and culture memory. There are a number of different works in literature done on this topics [32-33].

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