

## ABSTRACT

GLAM crowdsourcing game is an emergent form of serious game that is designed to collect and promote cultural heritage. However, as to date, the gameplay is quite boring and the data (e.g., tags) such games can crowdsource is limited; potential participants are restricted and crowdsourcing games for GLAM remain to be improved.

In entertainment games, Interactive Digital Narrative (IDN) is a commonly used method to engage players and improve playing experience. There are some successful entertainment games that embraced both the cultural heritage and crowdsourcing intentionally or unintentionally.

To make cultural heritage more creative, attractive and engageable, this paper proposes to combine Interactive digital narrative with Gallery, library, archive and museum Crowdsourcing (IGC) to create a new model for use by cultural institutes, scholars and the general public. Main methods for this paper are literature review, comparison and analysis based on literatures and real cases and model design.

This paper first studies cultural crowdsourcing games to analyse the relationship between crowdsourcing and in-game narrative. Subsequently, the IGC model, which combined models from the cultural digitisation process and interactive narrative will be proposed as an analytical tool for case studies; with the examination of *Animal Crossing: New Horizon* and *Ingress*, a preliminary validation of the IGC model application is demonstrated in different contexts and projects. Finally, we discuss future research approaches to making the IGC model as applicable and useful for digital heritage as possible.

**Keywords:** Interactive Digital Narrative, IDN, SPP Model, Hermeneutics, Hermeneutic Strip, Media Design, Intangible Cultural Heritage, Tangible Cultural Heritage, Digital Curation, Crowdsourcing, Digital Humanities, Digital Heritage, Interactive Narrative Design, Gamification, Animal Crossing, Ingress, Serious Game, Participatory Design