# Gamification as the Tool of Supporting Digitalization Processes and Protection of Cultural Heritage in Libraries

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Gamification is currently dominant in entertainment, marketing and branding, as well as supports the marketing activities of diverse types of It is becoming a popular tool of libraries. crowdsourcing and supporting digitization process as well as protection of cultural heritage in libraries. Gamification tools have been used to create the digital resources of national heritage, or more precisely, to engage users in the processes of improving texts and verification of the correctness of OCR results.

Keywords – gamification, crowdsourcing, digitalization, cultural heritage, digital libraries, DigiTalkoot project, Purposeful Gaming & BHL project

#### **INTRODUCTION**

In recent years libraries have been widely using digital technologies to implement projects, or public participation in tasks that have so far been performed by the library personnel (e.g. creation and improvement of data bases, transcription or processing of scanned texts). The tendency in libraries is to use digitization processes meant to protect cultural heritage. Digitization enables production of data which can be used in many areas: from basic recording and controlling of library resources to making them available in applications. A natural consequence of digitization is therefore to use the produced digital resources by means of new technologies. In recent years a popular tool that supports digitization processes is gamification. At present, it is dominant in

entertainment, marketing and branding, being also well-known to libraries.

## **GAMIFICATION IN LIBRARIES**

Gamification is the use of the mechanics known from role-playing and computer games to modify people's behaviors in non-game situations in order to enhance their commitment. The activities of libraries in this field have so far come down mainly to supporting the users' interests and passions and have usually taken the form of competitions and all kinds of tournaments for players. The popularization of the idea of gamification in modern marketing caused the libraries to also differently perceive the potential residing in games and gamification. It turns out that the potential of competition and play can be successfully utilized to promote library services and increase the degree of utilization of the collections, to support information education, to improve library processes, and to brand the institution. The popularity of crowdsourcing and the results achieved through it by entities in the economic sector are becoming an impetus for introducing its mechanisms also into the activities of libraries. A pioneer in this domain is the National Library of Australia, which implemented user-participation "Picture two projects: Australia" and "Australian Historic Newspapers". In the former, the Internet users sent photographs on the subject of Australia via the Flickr platform.

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In the latter, they transcribed newspapers of the late 19<sup>th</sup> and early 20 centuries, scanned with the OCR technique, and labeled and commented on the articles from these newspapers. Similar projects were carried out by institutions and libraries in the United States.

## **EXAMPLES**

The National Library of Finland, in cooperation with the Microtask company, used the Internet community to implement the project "Historical Newspaper Library of The National Library of Finland", whose goal was to protect the Finnish cultural heritage recorded in the documents collected in the library. The improvement of 18th-20<sup>th</sup>-century historical materials, including a sizable collection of scanned press articles, was carried out owing to Internet volunteers working DigiTalkoot platform, which on the in gamification elements were included in the improvement process. Two online games were designed - Mole Hunt (Myyräjahti) and Mole Bridge (Myyräsilta). Work on the digitization of archival materials continued in was the crowdsourcing "Kuvatalkoot". project \_ Gamification tools were used to create the digital resources of national heritage, or, more precisely, to engage users in the processes of improving texts and verification of the correctness of OCR (Optical Character Recognition) results. Another example of the use of gamification in digitization processes was the project: Purposeful Gaming & BHL (2013) Biodiversity Heritage Library - BHL, the international consortium of libraries collecting materials in botany and natural history, and the open digital library. It demonstrated the usefulness of digital games as the tools of transcription and analysis and improvement of OCR processing, and thereby of enhancing the availability and searchability of the scanned resources stored in the BHL. Two groups of documents were selected to be used in Purposeful Gaming: the 19th-century manuscripts by ornithologist Wiliam Brewster and

historical catalogues of seeds and seedlings. Two projects of games were developed, activated from Smorball and Beanstalk.

### **CONCLUSIONS**

The foregoing example do not exhaust the subject, they point to another area where games can be used in library activities. Gamification projects, apart from supporting digitization processes, play a significant role in promoting libraries. The use by libraries of the gamification idea and the crowdsourcing phenomenon has been noticed by many media, thus popularizing the knowledge about archiving national heritage. The new solutions have first of all changed the way of communicating with the user.

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