CONSIDERATIONS ON THE USE OF GAMIFICATION IN CITIZEN SCIENCE PROJECTS

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https://scent-project.eu/   @SCENT_EU   Scent h2020   **INTRODUCTION**   @ScentEU   scent EU   scent_eu

SCENT enables citizens to actively contribute to the collection and interpretation of information on land-cover and land use. Citizen-generated knowledge is combined with data from authoritative sources, in-situ sensors and information generated through advanced artificial intelligence tools. In one of the use cases of SCENT, citizens download a free mobile application and participate in a game where they have to visit specific geographic areas, find specific objects and take and annotate pictures. Pictures annotated by the users are sent to a cloud-based engine for further processing and then they can be uploaded onto existing earth observation repositories, such as GEOSS. SCENT leverages proven gamification mechanisms to ignite and secure the interest of the citizens over time.

METHOD

Best practices in gamification

We examined a variety of existing serious games, mostly related to environmental protection and we identified some best practices:

- To secure players engagement, it is important to carefully balance the education aspect with solid game mechanics.
- Simple 2D graphic design seems to be more suitable for cross-platform design and development strategies.
- In relation to the narrative dimension, simply and easy to grasp stories seem adequate to casual gamers.

- Interactions among players is a key element to support challenges, rewards and the players' overall level of engagement.
- Seeing how the other players are scoring can be a powerful motivational factor. In some exceptional circumstances, the user interface of the game is designed in a way that lets the player see the other players' contributions in real time.
- In some other cases, the interaction among players also allows them to create their own teams and groups and exchange goodies.

DISCUSSION

In terms of gameplay, fast and straightforward game mechanics that allow playing also for just a few minutes seem to be particularly suitable for a public of casual gamers.

Since the initiation of the pilots, August 2018, till June 2019, 1650+ users have interacted with the Scent serious gaming features, contributing to the collection and validation of environmental related information. Based on the general feedback collected from participants in the campaigns, the application is considered quite innovative, providing an interesting and fun way of gathering data.

Gamification components are continuously enhanced and updated, aiming to ensure increased participation levels over time.

PROJECT PARTNERS

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