

Gamification in Tourism



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Mini Review

Gamification was defined as an important issue for the future of tourism. Gamification could promote informal learning through fun and engagement. Many studies have explored the motivational processes activated through video-games, but there is a scarcity of studies that focused on gamified mobile applications for children in the tourism context. The present paper underlines the potentials of gamification in tourism for children and highlights the need for further research to develop adequate children-oriented gamified tourism services. Portability, connectivity and flexibility are three key characteristics that make mobile devices particularly suitable to be used in a touristic context. Thanks to localization systems and information sharing tools, mobile technology allows creating a learning network among the child, the environment, and the social context of the tourism experience [1]. Hence, mobile technology allows a context sensitive learning and amplifies children's informal learning experience outside the school environment. Children's use of mobile devices during the tourism activity might hold a great educational function. However, in order to realize these potential, mobile devices aimed to support child's tourism experience, these should assume a ludic function, in order to motivate children to use them [2] and to stimulate creativity and learning through play [3].

The World Travel Market Report identified the use of gamification in tourism as one of the main issues for the future of this field, as it appears appealing and engaging at every age. The term gamification refers to the use of game design elements and game thinking in a non-gaming context [4]. Many applications for Smartphone or tablet apply gamified systems. Currently, gamified tourism apps can be differentiated in social games, where the game prepares the tourist to the visit, and location-based mobile games, where the gamer plays during the visit. The main purposes of the former are to provide information to the tourist and to promote the place of the visit. Instead, the latter aims to encourage more engagement with the place for the exploration to be more immersive [5]. Location-based mobile games are usually based on the principles of the classic scavenger hunts, where gamers, that sometimes are in competition with others, have to collect information from the context and at the same time explore the place in search for

points of interest. In order to increase immersion [6] and the connection between real and virtual environment [7], location-based games often use Augmented Reality (AR). AR allows to visualize on the screen special virtual contents and images that are not visible nor present in the real environment. Deterding et al. [4] identify five main game interface design patterns like badges, leader boards and levels; game design patterns and mechanics like time constraint, limited resources and turns; game design principles and heuristics like enduring play, clear goals and a variety of game styles; game models like challenge, fantasy and curiosity; and game design methods like a play testing, a play-centric design and a value conscious game design. However, the important content components of the game alone are not sufficient for the game experience to be funny and engaging enough to fulfill its educational function. Gamification is effective when users are mentally and emotionally involved, and so intrinsically motivated. [4]. Intrinsic motivation is promoted by: connections with other players, that is the relational dimension; competency, by giving positive feedbacks to the player's actions; autonomy, that is the player's perception of the control of the situation [8,9].

Although motivation for playing video games has been widely investigated, there is a lack of research about motivation for playing with mobile devices. In fact, with the new technological devices, as smartphones, tablet and others, the playing experience changes, as well as the reasons to play. Playing experiences are becoming more «mobile» and strictly linked to the context, that acquires a critical role in the game [10] for the geo-localization through GPS. Indeed, mobile games are really sensitive to the context, because they connect the player to the environment with localized tasks and the presence of other players [11,12]. The environment deeply modifies the interaction between player and mobile game, because involves the possibility of movement, unpredictable states and particular physical parameters (e.g., the reduced screen dimensions and the noise) [13]. Regarding the gamification in the tourism studies, Xu et al. [5] after some focus groups with university students, have defined six important motivations to play with tourist mobile games:

- a) The curiosity to try this new kind of game for the first time

- b) The possibility to enjoy while exploring and collecting information about the place
- c) The possibility to experience the boundaries between real world and virtual world
- d) The social sharing of the touristic experience with local people and other tourists
- e) The possibility to enjoy while learning new things
- f) The challenges and the goals achievement, also typical in the traditional video games, that represents intrinsic motivations.

Currently, there are no studies about children's motivation to use gamification systems in touristic contexts. However, research on adults has shown that gaming can increase the people's interest in their destination. Indeed, gaming permits on the one hand the possibility to make experiences (autonomously, or sharing information with other players or locals) and on the other hand to obtain information, while enjoying the experience. [5]. Further, the use of gaming in touristic contexts seems to elicit intrinsic motivation, fantasy, entertainment and competition among the users [4]. [2]. In conclusion, the lack of information regarding gamification for children in touristic contexts, stresses the necessity of further research to develop new kinds of technological services addressed to infancy and childhood. The term "gamification" is derived from the concept of a game. This concept is interpreted as a real game, organized in rules and usually including competitive elements with other players. Although this prompts intrinsic motivation to gaming, the potential of gamification could increase with the inclusion of the concept of "playing", like a symbolical game which allows the child to see reality in a symbolical way, following a new perspective.

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