

## A NEW POSSIBLE WAY OF PROMOTING TOURIST PACKAGES: GAMIFICATION

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### Abstract

*Society nowadays is increasingly reliant on technology and the trend for the following years seems to maintain. At the same time, public and private organizations are searching for ways to innovate and optimize their activities and the internet as well as the increased use of electronic devices provide new perspectives for this.*

*Besides the public sector, high ranking companies from domains such as commerce to health or tourism, have started using a new tool: gamification.*

*While some of the first attempts to implement the idea of 'games' for selling products go as far back as 1912, the scientific concept of 'gamification' is quite new and has just recently been recognized as a study domain. In addition to this, a rising interest in the field is also proven by an increase in number of searches for the term on search engines as well as in scientific databases.*

*From an organizational point of view, through the use of these techniques, institutions can obtain a positive influence on sales, enhanced customer retention, better marketing, improved employee-management communication, overall optimization of activity etc.*

*This paper aims to offer a contribution to the research in the field of gamification, to show some of the revolutionary solutions found by top organizations, based on gaming techniques, and to propose a model for implementing gamification in a tourism organization. The research starts from studying the gamification model implemented by leading tourism platform, Tripadvisor and focuses on building a game-specific architecture that can be applied to Romanian tourism sites, ranging from tourist review sites, such as turistinforo.ro to online tourism agencies. This model includes elements specific to games, and characteristic for the gamification concept, such as: avatar, rewards, challenges, points, badges, leaderboard. The study finishes with opinions regarding the economic and social benefits of implementing gamification as an innovative technique in tourism and conclusions.*

### Keywords

innovation, IT in tourism, social gaming, gamification

### JEL Classification

O30, M10

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### Introduction

Society nowadays is increasingly adapted to using technology in almost all aspects of one's life. People use smart devices to communicate, share information, learn, do commerce, relax, etc. At the same time, new applications are developed for these smart devices, ranging from programs that customize the gadget according to the user's needs to games that gain rapid popularity.

The gamification approach implies using techniques specific to the gaming industry in a non-gaming context in order to motivate, engage or change the psychological behaviour of users. Current studies show that, by using gamification tools, subjects can improve important psychological areas, such as enhancing focus and strategic thinking and, on a social level, bring benefits such as: belonging to a group, educational benefits, psychological well-being etc. (Werbach, 2015).

From military training, to sharing knowledge among a company's employees, to respecting traffic rules, improving sales or promoting health and wellness, the gaming architecture has proven efficient in motivating people. Some studies show that through the use of specific gaming techniques, people are more engaged in fulfilling an action and psychological changes can be triggered.

Tourism makes no exception, and top ranking tourist platform, Tripadvisor has already implemented a successful model. The characteristics of this model will be analysed in the current study and a new model will be built, that can be applied for Romanian tourist sites.

## **1 The development of gamification**

Modern society sees technology as a part of individual's lives. From traditional devices, such as televisions or refrigerators incorporating increasingly more technology, to smart mobile devices: phones or tablets or wearable accessories: watches, glasses, etc., individuals today are more reliant on high-tech electronics to make their lives easier.

Along with the enhancement of internet access worldwide, more people are connected and an increasing amount of data is available, making this an interesting area for public and private organizations worldwide.

Communications, learning, finances, health, tourism etc., can no longer be conceived operating without the IT component. In these circumstances, new software applications have evolved, adapting to the characteristics of the gadgets used on and to the needs of the users. One interesting new domain is that of social online gaming.

Games such as Angry Birds or Candy Crush, have gained rapid popularity, within a few years gathering millions of users worldwide. Candy Crush alone reported having 93 million daily active users in 2014 (Makuch, 2014). Moreover, 53% of Facebook users have played a social gaming application in 2012 (Miller, 2014).

What contributed to the success of these applications? Some of the main aspects that characterize them are: easy game play, clear and simple system of rewards, hierarchy based on levels, the possibility to use an avatar and, maybe the main aspect that differentiates them from previous types of computer games, the social component: they are built around a social platform, promoting communication and token exchange between users. Built on the same architecture, a new approach is catching terrain among top organizations worldwide: gamification. Gamification refers to the use of the previously mentioned gaming elements in a non-gaming context (Werbach, 2015).

Though the first attempt of using a game to promote a product goes back to 1912 when American food company Cracker Jack promoted their popcorn bags by selling a toy along with each package, the term gamification has just recently been recognized, in 2011 by the Oxford British dictionary.

Lately, a rising interest in the concept can be seen through the increase in number of searches on the Google platform for this term, as well as from the increase in number of scientific papers written on this subject: from 7 in 2011 to 141 in 2014 (Procopie et. al, 2014).

The natural question that follows is: how does it work? Through the use of a gaming architecture, applied to the needs of the organization, users (clients, personnel etc.) are motivated to perform certain tasks through a system of rewards: badges, points that in the end can be transformed into benefits, including material ones. Users see their achievements on the framework, they can compare them to other users', they can communicate, share benefits specific to the environment, or what information they desire with other members. Besides certain skills that games are considered to contribute to developing, such as enhancing focus, memory and strategic thinking (Vasilcovschi, 2015), the combination of gaming mechanics with the psychological motivating factors have contributed to the success of the gamification approach.

One explanation is that this tool caters to certain psychological needs, such as the desire to have the recognition of others for one's achievements, the enjoyment felt after completing a complex goal, the reputation of being on the top ranks etc. These intrinsic motivations are believed to have strong impact on users, thus having the capacity to trigger certain behaviours (Murray, 2006).

## **2 Some directions for applying gamification**

As games are considered to be able to contribute to enhancing interdisciplinary knowledge, incorporating information from domains such as design, technology, strategy, psychology etc. (Seaborn, 2015) the utilities for gamification, so far, varied from fields like army to learning, health and wellness, commerce or tourism.

When referred to the military domain, gamification has been successfully used in training in battle simulations (Werbach, 2015).

Learning site, Coursera, applies a system of badges and levels, based on the number of courses a user has finished; it also allows users to see other's achievements, use an avatar and share information on the site's community.

In health and wellness, a multitude of applications have been developed and can easily be downloaded from app stores on one's mobile device. These can keep track of calories intake, calories burnt, number of steps per day, diet plans and so on. Nike, for example, implemented a tracking sensor in one of their latest shoe models, that paired with an application installed one's phone, can record the user's fitness progress, rank it and compare it to his friends' for further motivation (Werbach, 2015).

From an enterprise point of view, gamification can be used internally, to motivate and engage employees or externally, to retain customers or involve them in the innovation process, for example (Everson, 2015). One case

is that of the German company SAP that designed a gamification system for their employees, rewarding those that pick up other employees on their way to work with points that can be later transferred into benefits, such as free days or financial rewards, and can also be used as a tool in the annual evaluations (Harbert, 2014). A US based company, Accenture, developed a gamification system that stimulates employees to share knowledge, especially work-related topics, on the company's platform, creating a hierarchy with the most active employees and rewarding them (Harbert, 2014). From a customer point of view, one example is that of Caesar's Resort and Casino that attributes certain hierarchical statuses to their clients, based on their activity, rewards loyal customers with points, which can be later used for paying for products, services or accommodation in the Caesar's Resort or any other partner hotels. The clients can see their status information, compare it to any of their friends, if they are also Caesar's clients, and access and share information on the online community.

Tourist site Tripadvisor also uses a gamification approach, with avatars, points, levels and badges for users' achievements. One can connect on the site, through Facebook and see all his/her friends' activity, compare performance, plan future trips or share information through the community.

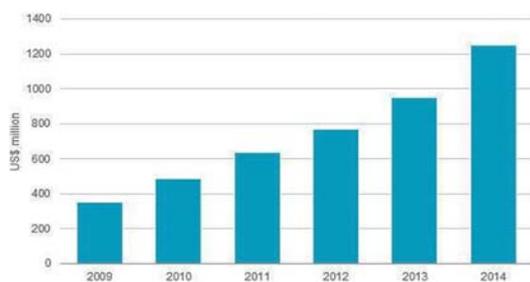
No matter the domain, premises are optimistic for the gamification market which is expected to grow to \$2.8 billion by 2016, according to M2 Research, a gaming research company (Everson, 2015).

All these examples show that the gaming environment is gradually becoming "the new ecosystem that man lives in" (Shian Long, 2014), and for younger generations the interaction mechanisms should be adapted to this specific ecosystem. One of the traits of generation Y is the need to be more involved in decision making processes that concern them, which can be catered by the use of gamification (Procopie, 2015). Tourism is also an important domain that should adapt to these changes, and in this regard is useful to identify and integrate appropriate gamification techniques for tourism development.

### 3 Building a model for promoting tourist packages

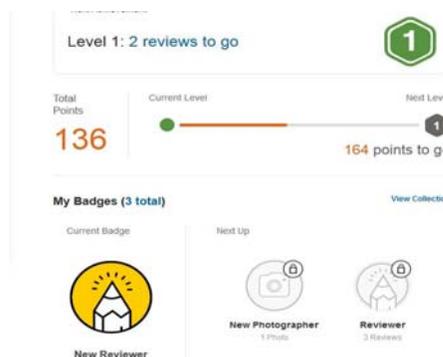
#### 3.1 The Tripadvisor case

An essential demand for gamification plan is to generate engagement: users can be distracted by various stimuli, hence the application has to be attractive, to build emotional attachment and motivate the individual to stay in the 'gaming environment'.



**Figure no. 1: Tripadvisor revenues 2009-2014**

Source: <http://blog.euromonitor.com/2015/04/tripadvisor-challenges-otas-through-instant-booking-functionality.html>



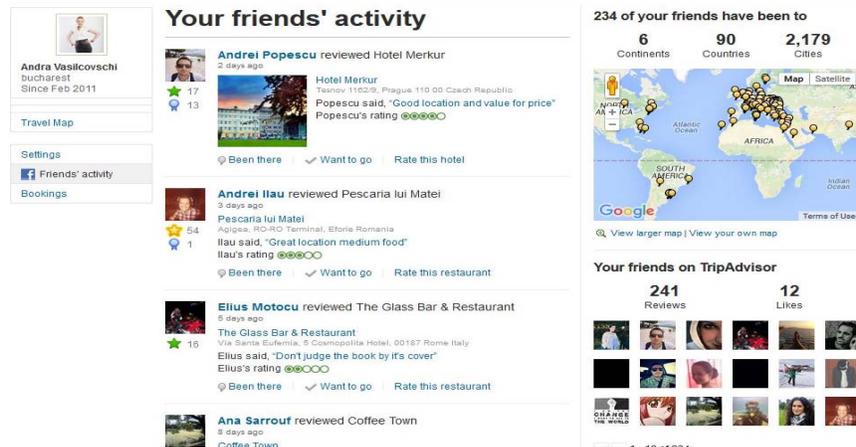
**Figure no. 2: Tripadvisor achievement system**

Source: [www.tripadvisor.com](http://www.tripadvisor.com)

One interesting example of applying gamification in tourism is that of the American tourist site, Tripadvisor. The platform has had a positive evolution over the past years, as seen in Figure no. 1 and is currently considered to be the number one tourist site worldwide, with 315 million unique visitors in 2015 (Rossini, 2015).

The site architecture incorporates some specific gaming elements. Users can choose an avatar to represent them; they can either upload a photo or connect through Facebook. In this case, the Facebook profile picture will be used; users can choose a nickname or opt for using their Facebook name. There is also a system of achievements: each user receives points according to his activity, can advance through levels and earns badges, as seen in Figure no. 2.

Furthermore, one can see a leader board with his friends' hierarchy and have access to in-site forums, through which users exchange travelling tips, as shown in Figure no.3.



**Figure no. 3: Tripadvisor friends' activity**  
 Source: www.tripadvisor.com

### 3.2 Some directions on applying gamification in Romanian tourist sites

Most Romanian tourist sites have little or no elements specific to the gamification environment implemented. Usually they offer only the possibility to upload a picture that can be used as an avatar, Romanian tourism review site [turistinfo.ro](http://turistinfo.ro), which can be considered the autochthonous version of Tripadvisor, has no gamification elements implemented.

To improve the system and apply a gamification model, tourism sites like these would require implementing the elements specific to games in their architecture: avatar, rewards, challenges, levels, badges, leader board, as seen in Figure no. 4.

Another step would be importing data from social platforms such as Facebook, Google or Yahoo email, and building a forum on which users can communicate and exchange information. When creating an account, the user should have the option to log into the site using any of his social accounts.

Based on this architecture, some of the main services of a tourism site, enumerated in Figure no. 4: information, promoting tourist packages, socializing, personalized travel guides, planning, could be provided easier and at a higher quality.

On the site's forum, users could share information regarding the topics they are interested in and socialize. Other users can see the places one has visited and the topics one is interested in and, indirectly, these destinations could be better promoted. In addition to this, on the forum itself, tourist packages can be promoted, through banners.

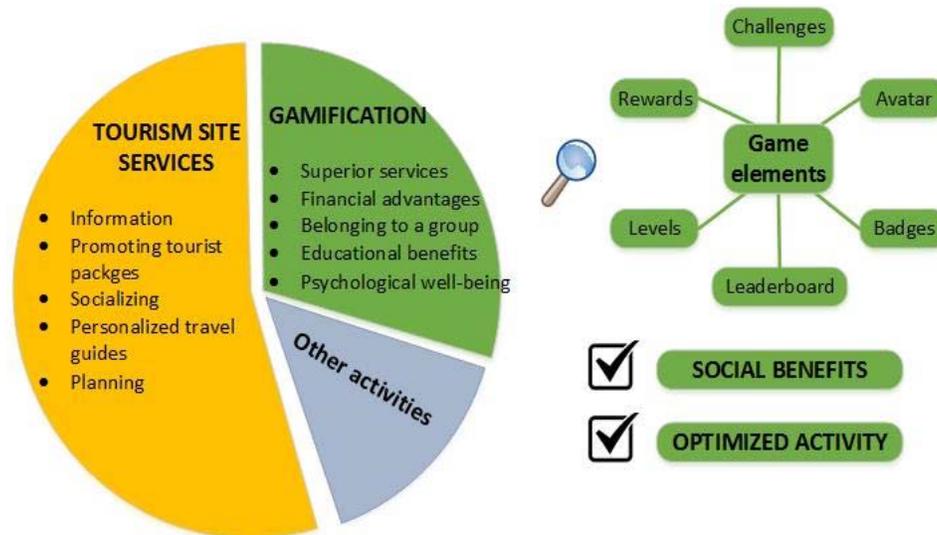
When connecting through Facebook, for example, the site could import the location-map with places where the user has signed in, through Facebook, and create a in-site map customized based on his preferences, then promote tourist packages for those destinations or recommend similar destinations. Thus, personalized travel guides can be designed and a travel itinerary can be planned.

Another advantage for promoting tourist packages, when importing contacts from a social environment is the viral character. A user's contacts could see the places he has visited and his overall activity on the tourist site and choose to access the site themselves.

One additional aspect characteristic to gamification that should be implemented in a tourist site would be a system of rewards. Based on one's activity: writing a review, uploading photos from a vacation, contributing with information to a forum discussion etc., players should receive points, badges and advance through levels.

To bring a new approach, compared to Tripadvisor, the proposed model could also award points for tourist packages bought through them, points that could be later used to get discounts on other tourist packages. This way sales would be promoted, customers would be better retained and they would get better value for their money.

Furthermore, a leader board with one's friends or the most active users of the site should exist. Through it, individuals could see the achievements and progress of their Facebook friends or Yahoo contacts, for example. This could lead to an increase in motivation and enhanced engagement in the site's activity.



**Figure no. 4 Applying gamification in promoting tourism packages**

*Source:* Own representation of a gamification model in tourism

As seen in Figure no. 4, by implementing gamification, a tourist site would provide overall superior services to his users, meaning financial advantages, the social component: belonging to a group, educational benefits or psychological well-being. The points can be transformed into discounts, or simply by talking on forums and choosing the best-suited option based on the information provided, a user can obtain financial benefits. Socializing on the site's forum, on topics of interest, can bring educational benefits and a positive state of mind. All in all, implementing the model could bring social as well as economic benefits.

#### 4 Economic and social benefits of implementing the gamification model, in tourism

Applying the gamification model presented, in Romanian tourism sites could optimize their activity, on the one hand, and bring users several benefits, on the other, among them, one could point out:

- **Financial advantages**  
Transforming experience points into discounts could lead to an improvement in income for the site; at the same time, customers would pay less for the packages bought.
- **Belonging to a group**  
The social component lead to the increase in popularity of social networks as well as social gaming applications over the years. It is in people's nature to communicate and share information. Some researches show that recommendations are some of the most trusted ways on which people fundament their buying decisions' (Safko, 2010). Thus belonging to a group could improve the quality of people's lives, help in improving and sharing knowledge or aid them in making the best choice when purchasing a tourist package.
- **Educational benefits**  
Through the use of gamification on tourist sites, individuals could improve their communication skills, or gain knowledge in areas such as history or geography by reading the reviews posted or communicating with other members. Furthermore, enhanced focus and strategic thinking are some of the areas that gamification can contribute to developing (Miller, 2014).
- **Psychological well-being**  
Communicating with others on common topics, such as travel can be a leisure activity.

#### Conclusions

New technologies are increasingly present in people's lives. At the same time, innovative applications have been developed and adapted to the multitude of smart devices currently present on the IT market. Application stores, especially for market leaders Android and Ios, offer a wide variety of programs and games and acces to internet is now considered a common necessity.

These characteristics of the modern society also shape our expectations and needs, and provide new ways for organizations to innovate. Although new, the concept of gamification has gained recent popularity, with top companies and institutions in various fields implementing it. From retaining costumers, to triggering certain changes or promoting positive behaviors, the main element of gaming tools is their ability to motivate and engage people into fulfilling a certain goal. They generate change in psychological patterns through the use of game techniques. This has been successfully used so far in domains such as health, learning, military traiing, commerce and now in tourism.

Designing a gamification model adaptable to a tourism site implies using game specific elements.

Importing data from social platforms would also be useful. Connecting to the social profiles of users allows the site to gain acces to their network of friends and locations visited and offer the possibility for improved services, personalized travel guides or planning the next vacation, for example. It would also serve as a marketing tool, due to the viral character of the social networks and motivate users to be more active, by comparing their achievements with their friends’.

The proposed model would bring benefits for both the user and organization, from financial advantages, to social gain, promoting sharing knwoledge and acting as a leisure acitvity.

The arguments above create the premises for developing gamification and implementing it in increasingly more tourism areas in the future, which will also bring about the need for future research in this field.

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