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Gamification for tourism marketing and travelers motivations

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Abstract

The emergence of digital marketing technologies and the change in social culture have revolutionized marketing in the travel and hotel sector. More opportunities for marketing innovations have recently arisen with the introduction of new technology including smartphones, artificial intelligence, virtual reality (VR), robotics, and new GIS. Information technology breakthroughs have altered managerial attitudes, service standards, and corporate procedures. In recent years, certain creative tourist industries have adopted gaming as a cutting-edge idea to connect guests more deeply and as a marketing tool. The purpose of this paper is to investigate the gamification trend and its possibilities for experience creation and travel advertising. This paper examines the relationship between gaming and tourism and what motivates travelers to play games using focus groups. The findings imply that there are multiple factors influencing tourists' interest to play games. Purposive information seeking is typically the first step taken by players before transitioning to intrinsic stimulation. Another crucial aspect is socialization. The paper shows a number of marketing implications for travel.

Keywords: Gamification, motivations, tourism industry, virtual reality, mobile games, gaming applications

1. Introduction

Electronic games, sometimes just referred to as "games," give players an immersive and engaging entertainment experience by allowing them to interact in real time and dynamically with other players, local organizations, and their surroundings. Gaming becomes mobile as a result of the quick development of mobile devices like smartphones and tablets, enabling dynamic interaction at the user's location. Players can engage with their real-world surroundings in real time via smartphones (Hinske, Lampe, Magerkurth, & Röcker, 2007)^[16]. According to research, mobile games have altered the experiences of players in a variety of ways (Blum, Wetzel, Mccall, Oppermann, & Broll, 2012)^[3]. The extension of gaming experiences into the real world, which may be accessible anywhere and at any time, is one of the most significant advances.

Gamification is the term for the recent usage of persuasive technologies like gaming and the incorporation of game aspects in non-gaming contexts including business, health, and education. Technology that uses social influence and persuasion to alter users' attitudes or behaviors is referred to as persuasive technology (Bogost, 2007)^[4]. According to Oinas-Kukkonen and Harjumaa (2008)^[30], persuasive applications are frequently computer programs or information systems that are intended to modify, reinforce, or mold attitudes, behaviors, or both without the use of coercion or deceit.

Some tourism organizations have utilized gaming as a cutting-edge concept for marketing and dynamic user involvement, and it is quickly becoming a helpful tool. Gaming is a novel way to sell travel destinations, giving travel agencies and destination marketers the chance to design engaging and educational environments for effective brand recognition, engagement, and communication. In fact, Middleton (1994)^[29] notes that both formal (such as advertising, the internet, and sale promotion) and informal (such as other forms of communication) channels of communication influence the decision-making of tourists. Numerous scholars have debated the significance of using experiential information in promotional stimuli for tourist marketing, given that the tourism sector is essentially an experience industry ((Goossens, 2000)^[15].

Therefore, gaming as a technical instrument has the ability to foster dynamic relationships and aid in the development of such experiences. For instance, through a treasure hunt, location-based games might provide tourists with an opportunity to experience points of interest. "Tourists can solve mini-games related to their experiences and learn something about their surroundings by following a list of recommendations provided by a mobile game" (Linaza, Gutierrez, & Garcia, 2014, p. 498) ^[25]. The design of serious games goes beyond just providing players with amusement. They mostly carry out duties and accomplish goals that cater to important user needs, such as medical applications, education, on-the-job training, and cultural heritage. In order to help users, learners, and tourists better understand and enhance their experience, serious games frequently gather data about their brand consumers, identify thought processes, priorities, and interests, and use gaming technologies and methodologies to engage users, learners, and tourists at a deeper level.

Since there are currently very few successful instances of gaming in many industries, including tourism, mostly in the areas of specialized treasure hunts and cultural heritage applications, gaming is still in its infancy. The field of gaming in tourism is relatively new. It is extremely difficult from a technical standpoint in two ways. From a game programmer's perspective, creating location-based tourism games, like those based on augmented reality, is more difficult because AR still has some technical problems of its own, such as real-time calibration. The first is that game designers must comprehend the needs and desires of both tourists and gamers, then seamlessly combine them to create memorable, enjoyable, and engaging gaming experiences for this specific segment. Non-technically, further research and exploration are required into these games' financial models. Tourism-specific games, as opposed to generic or standard games, call for extremely detailed information about a given location, which can occasionally be challenging to include in the games. Because the target audience for a tourist game is so small, a game maker must also consider the game's commercial feasibility.

Some serious games are gradually being created with the intention of conveying information about tourism, with a focus on players who are tourists. But because they don't comprehend the tourist players, they don't always succeed (Fernandes, Almeida, & Rosseti, 2013) ^[14]. Tourist players are more interested in their surroundings and frequently play in unusual settings with less time available than traditional game players at home (Fernandes *et al.*, 2013) ^[14]. Despite being significant mobile game users, little is now understood about the reasons behind and experiences of visitors' gaming. Traditional games and games played for pure amusement have been the focus of earlier research on gaming motivations. These studies have shown how crucial it is to investigate the motivations of players. In fact, a

thorough comprehension of motivations can assist game designers in producing engaging and valuable games that will improve users' experiences. economy.

2. The Idea of Gaming

Running software artifacts dubbed electronic games-often just referred to as "games"-is known as gaming. It is thought of as a closed system where rules must be specified in advance (Salen & Zimmerman, 2004) ^[34]. According to McGonigal (2011) ^[27], objectives, guidelines, feedback mechanisms, and voluntary involvement are crucial aspects of gaming. Juul (2003) ^[23] adds the player's emotional attachment to the game and its particular result.

Mobile gaming has been made possible by the widespread use of smartphones and tablets, which is also altering the game experience. game experiences have become much more mobile with the rise in popularity of smartphones, tablets, and personal digital assistants (PDAs), and context is crucial to the game experience. Players have a more engaging and authentic experience with location-based, GPS-enabled mobile games, especially those like Shadow Cities and Geocaching. Players have been transported from the virtual world to a real or mixed world setting using location-based mobile games. According to Grüter (2008) ^[42], mobile games place a strong emphasis on positioning and mobility, frequently leveraging the game's background to reflect the context of the player's location.

In location-based mobile games, the players' mobility and actual position are crucial. According to Klopfer and Squire (2008) ^[43], mobile gaming is becoming increasingly context-sensitive because of game programs (apps) that link the player to his physical location, motivate him to finish tasks nearby, and allow him to interact with and compete with other players. The most recent generation of smart devices has created whole new gaming experiences. Technology and social media have quickly made gaming acceptable for both men and women, young and old, and those who have never played games before. This is due to everything from smartphone game apps to online social engagement.

3. Motivation of Game Players

This When it comes to playing games, motivation is crucial. According to Ryan *et al.* (2006) ^[33], there is a dearth of study on game players' motivation. According to Boyle, Connolly, Hainey, and Boyle (2012) ^[5], research on the motivations for playing video games is mostly centered on the satisfying of needs and is supported by rigorous theoretical models. Table 1 summarizes the primary motivations that the researchers found. Researchers generally concur that games are employed for enjoyment as well as to meet the needs for relatedness and competence, despite the use of various methodological approaches.

Table 1: Intrinsic and Extrinsic Motivations of Game Players

Motivation	Literature
Freedom in a virtual world	Socialization – social
Sense of belonging	Lin & Lin (2011) ^[44]
Socialization-social interaction	Ryan <i>et al.</i> (2006) ^[33] ; Yee (2006) ^[45] ; Chou & Tsai (2007) ^[46]
Excitement	Lucas & Sherry (2004) ^[47]
Escapism	Yee (2006) ^[45] ; Frostling-Henningsson (2009); ^[48]
Fantasy	Paras & Bizzochi (2005) ^[49]
Positive emotions	Huang <i>et al.</i> (2013) ^[50]
Flow	Huang <i>et al.</i> (2013) ^[51] ; Zhou (2012) ^[52] ; Engl & Nacke (2012) ^[53]
Character	Tychsen <i>et al.</i> (2008) ^[54]

One of the earliest studies on player motivation was Bartle's (1996) ^[1] study on player type. Bartle (1996) ^[1] distinguishes four categories of players based on their participation in Massively Multiplayer Online Games (MMOGs): achievers, socializers, explorers, and murderers. Eighty percent of players are socializers; they seek out opportunities to interact with others. Achievers are constantly seeking out new challenges. Less than 1% of all game players are killers, who are the most active and captivating.

Explorers are keen to learn the game's scope by exploring every angle, while killers are more interested in competing with and defeating other players. Although his study is only applicable to MMOG, Bartle's (1996) ^[1] work has given numerous scholars a significant foundation; It's unclear if it applies to mobile games nowadays. The motivation of game players in a mobile context needs to be reviewed in light of the variations in mobile games. However, Bartle's (1996) ^[1] player type model acknowledges the need of comprehending the motivations of various players.

The incentive to play may also be influenced by factors like gender, age, experience, and even personality, according to researchers. According to Jansz, Avis, and Vosmeer (2010) ^[22], men place greater value on challenge, fantasy, and social contact than do women. According to Olson (2010) ^[31], men are more likely than women to play games for enjoyment, competition, challenge and excitement, relaxation, and anger management. varied age groups have varied motives, according to Eglesz, Fekete, Kiss, and Izsó (2005) ^[12]. Younger people are more likely to be motivated by sensation-seeking, but older people (those over 30) are more likely to try again after failing. Scholars concur that as players gain experience, their motivation shifts. According to Wan and Chiou (2007) ^[36], internet addicts place greater value on intrinsic motivation, whereas non-addicts place greater value on extrinsic incentive.

Traditional games serve as the foundation for the majority of player motivation studies. Little is known about players of mobile games, especially those that use GPS, as these players may be motivated differently by the context awareness and mobile positioning features of the games (De Souza e Silva, 2013) ^[11]. The way a user interacts with a mobile game, which incorporates movement, unpredictable states, and many physical characteristics like light and noise, a limited screen, and so on, can be greatly changed by the context or surroundings (Rapits, Tselios, & Avouris, 2005). Users can annotate areas, locate other nearby individuals, and access information related to particular locations thanks to a mobile device's location-aware features (De Souza e Silva, 2013) ^[11].

For mobile players, socialization becomes increasingly crucial. The player is a part of the local space, as shown by the idea of Net localization. However, the players' movement within the game is also limited by the distractions of traffic, especially in urban regions. Players can interact with the game in a dynamic and efficient manner thanks to context awareness, which gives them information that is extremely pertinent to their current circumstances or a customized context. Additionally, researchers found that mobile gaming encourages rivalry, teamwork, and a sense of community (social motivation) (Li & Counts, 2007) ^[24].

4. Tourism and Gaming

There may be excellent marketing chances when games are used in the tourism sector. Co-creating individualized

services is becoming a more important aspect of the tourism industry, which is an experience sector. Technological instruments for creating such experiences are made available by new technologies like social networking, smartphones, and gaming. In fact, the tourism sector has consistently been among the first to adopt innovative initiatives (Buhalis & Law, 2008) ^[6]. The World Travel Market Report (2011) states that gamification is a significant trend in tourism that will appeal to customers of all ages in the years to come.

The tourism industry's current use of gaming can be split into two categories:

1. Social games (play before you visit), which are based on social media platforms like Facebook and are primarily used to increase brand awareness, draw in new clients, and enhance the perception of a place or business. Examples include Nanjing, China, Ireland, Cape Town, South Africa and Thailand. Destination management organizations (DMOs) created these games to promote their destinations. Numerous airlines, such as Virgin Atlantic, British Airways, and KLM, have also created games to involve customers in branding and marketing initiatives.
2. According to Waltz and Ballagas (2007) ^[35], location-based mobile games are primarily utilized to promote greater interaction on-site and to make tourists' on-site experiences more enjoyable and educational. But according to Linaza *et al.* (2014) ^[25], "a tourist destination is an extremely rich source of information, supplying tourists at every moment with a continuous flow of images, sounds, and feelings that cannot be fully simulated by computers" (p. 498). The game mechanics of the traditional treasure hunt serve as the foundation for the majority of current tourism destination games. For instance, the goal of REXplorer is to encourage visitors to discover and appreciate the history of Regensburg, Germany, a city designated as a UNESCO World Heritage Site (Waltz & Ballagas, 2007) ^[35]. In Trondheim, Norway, the Amazing City Game was created to entice visitors to participate in a knowledge competition tour by having them complete activities at various locations. Because it makes it possible to merge virtual and real worlds, augmented reality (AR) is a popular approach used in location-based tourist games to enhance immersive experiences on-site (Mashable, 2013) ^[21].

These gaming applications don't always work, though. They frequently lack entertaining and occasionally information on tourism destinations, and they fail to interest travelers. For instance, Celtek (2010) ^[7] reviewed 15 mobile advertgames and found that, with the exception of VeGame and Geocaching, none of the games provided information on the location and nation. Technically oriented game creators might not always understand why and how visitors want to play. As a result, it is essential to develop games with the user in mind. The design of these games will benefit from a thorough grasp of the motivations and gaming experiences of tourist players. Theories about the motivations of game players exist, but they don't directly address tourists, therefore they don't take into account their demands. According to research, visitors typically have a limited amount of time (Fernandes *et al.*, 2013) ^[14], have different information needs than other players, and are unfamiliar with the area. Tasks must therefore be less difficult and unclear when playing games. Important facets of game design include understanding why and when tourists

play games, what kinds of games they like, and what they anticipate from game-based marketing.

5. Gamification in Tourism Marketing

A potentially novel form of tourism marketing opportunity is provided by game-based marketing. According to Chaffery and Ellis-Chadwick (2012) ^[8], mobile marketing and gamification are significant developments for the future of marketing. The whole marketing mix is changing as a result of digital technologies. When it comes to game-based marketing, virtual experiential marketing makes the product promotion more enjoyable and intimate. According to Zichermann and Linder (2010) ^[41], games are about having fun, and fun is the new marketing element - a very potent aspect of marketing. As a result, games can offer a fresh, effective, enjoyable, and fulfilling method of engagement and connection.

Numerous scholars have acknowledged the significance of utilizing experiential data to promote stimuli for tourism marketing. According to Williams (2006) ^[38], a novel strategy for promoting tourism destinations is the use of immersive virtual environments, which give destination marketers the chance to design engaging and educational environments for fruitful engagement and communication between the destination and visitors. Technology like virtual reality, according to Berger *et al.* (2007) ^[2], enables prospective travelers to get travel information and see a destination's 3-D depiction. There are many advantages to using games in tourism marketing, including raising brand recognition, drawing in new clients, improving visitors' on-site experiences, and boosting engagement.

Real-world settings, like tourist destinations (like those in China and Thailand), can provide as inspiration for game creation. It offers prospective guests a fun and educational environment. Virtual reality or AR 3-D technology is typically used in games to create an immersive and captivating experience with both the virtual and real world. Ad-purpose games, or "advertgames," are a significant new kind of marketing tool that may provide players with amusement while fostering an emotional bond between the brand and the game. According to Celtek (2010) ^[7], employing advertgames has the benefits of being more individualized and less obtrusive.

Additionally, as a sense of community is frequently seen, gaming offers a wonderful chance to create an online community. Virtual communities should be used to better understand customers and offset poor word-of-mouth, according to Buhalis and Law (2008) ^[6], who acknowledged that they could affect brand awareness. According to Wang, Zhang, Choi, and D'Eredita (2002) ^[37], brand recognition and loyalty might result from the brand-building that takes place in virtual communities.

Experiences offered by the tourism sector are complex and multidimensional. According to research, leisure activities are about entertainment (Farber & Hall, 2007) ^[13], escape and relaxation, fantasy and fun, novelty and surprise and feeling. Gaming research could be useful to the study of visitor experiences. The various emotions, including hope, fear, and excitement (Zichermann & Cunningham, 2011) ^[40]; the experiences of fantasy, fun, and challenges; the joy of playing and the desire to keep playing in order to push oneself all contribute to a profound engagement and addiction to game play, as well as interaction with tourism organizations and destinations.

According to researchers, the emergence of a new generation known as "Generation G, who were born after 1998, whose principal form of entertainment is games and who is the first truly mobile and social generation" (Zichermann & Linder, 2010, p. 163) ^[41] presents a new challenge for future marketing: meeting the needs of this socially and mobile-oriented generation while also collaborating to co-create products and services in a dynamic way.

6. Tourists Motivations on Vacation

It's crucial to comprehend why people take vacations and what they need in terms of travel-related goods and services. Studies on the reasons behind tourists' vacations have long been conducted in the tourism industry (Hsu, Cai, & Li, 2010) ^[17]. According to Maslow (1943) ^[26], persons have a basic, low level of physiological needs for protection, love and belonging, esteem, and self-actualization. Propose four dimensions of motivation: intellectual, social, self-challenge, and stimulus-avoidance. Dann (1977) ^[10] and Crompton (1979) ^[9] separate motivations into push and pull elements. Among the reasons given by Iso-Ahola (1982) ^[18] are seeking and escape.

Physical, cultural, interpersonal, and status and prestige motivations are some of the reasons proposed by McIntosh, Goeldner, and Ritchie (1995) ^[28]. Since business travelers frequently have no say in their destination or activities due to meetings, conferences, and work agendas, the holiday incentive discussed in this paper is mostly relevant to leisure travelers. However, even business travelers with a few hours to spare can play a game (like Treasure Hunt) to acquaint themselves with the place before they visit, or they can utilize the game to explore a destination in the short time available.

The reason to play games is multifaceted, according to researchers. Numerous factors, including age, gender, life stage, and prior travel experiences, can have an impact on it (Jang & Cai, 2002) ^[20]. It is clear from the material mentioned above that there are some aspects of the reasons why tourists travel and why gamers play games that overlap. It is unclear, nevertheless, if these common gamer motives also apply to tourists.

7. Conclusion

The travel and tourism industry is one of the biggest and most widespread in the world, making it equally vulnerable to the forces of change resulting from the quick advancements in the field of information and communication technologies (ICT) (Buhalis & Law, 2008) ^[6]. More money is being spent by travel destinations worldwide on ICT use for marketing and destination management. One of the most promising ICTs is gaming, which has applications in a number of fields, including entertainment, education (interpretation), and co-creating travel experiences. By offering experiences and information that would not otherwise be available, gaming can increase tourists' interest in the place and help them co-create a unique travel experience. Involving locals and other stakeholders can improve this experience even more and have a significant impact on how people engage with places generally.

Research on gaming motivation has always been crucial. Design-specific games can benefit from an understanding of the reason for game play. The motivations of gaming tourists are identified in this study, which is a significant addition. Playing a tourism game is mostly done to interact with others and get useful knowledge about the place before, during, and after the trip. It's also crucial to experience the fantasy and

enjoyment of playing games both virtually and in real life. It is clear that by providing visitors with dynamic, customized, and contextualized experiences, gaming may establish a new paradigm for the sector. Both game designers and tourist marketers need to understand the motives of the players in order to create appropriate games and experiences with state-of-the-art technologies. Throughout the whole travel experience—before, during, and after the trip—gaming can keep travelers entertained, educated, and memorable.

Prior to trip, gaming can provide a creative means of promoting a place, drawing in a large number of prospective visitors and allowing them to interact with the place more deeply. Game-based marketing has a lot of potential to raise brand awareness and draw in tourists. Gaming can help players enhance their potential experience and study specific parts of the place while they are searching for information about it. As a result, it is crucial to use highly interactive and customisable games to purposefully convey destination information. Marketers can build their game designs on certain amenities and attractions, especially those of lesser-known locations. In order to set players up for a more fulfilling stay, they can also create games that let them pursue hobbies like archaeology, bird watching, or gastronomy.

Games can be utilized to pass the time in the transit area throughout the journey. They can also improve visitors' on-site experiences and make the trip more enjoyable. In particular, location-based and augmented reality games can motivate visitors to engage with the actual surroundings, get additional knowledge about the site, customize their trip to suit their interests, and provide a more engaging and authentic experience (Waltz & Ballagas, 2007) ^[35]. By giving players the impression that they are a part of the game rather than an external entity, gaming can provide tourists with a genuine, customized, enjoyable, and fantastical experience. By immersing visitors in the location, games can also aid in the development of an emotional bond. The findings emphasize the chance to interact socially with other gamers who are tourists as well as locals. According to Chou and Tsai (2007) ^[46], games can therefore become online venues that facilitate value co-creation and the development of new or maintained social interactions. Numerous scholars have proposed that this aspect of socializing is a crucial component of tourist motivation.

Games are primarily used to remember the vacation and impress others once it has ended. They can also let players go deeper into certain aspects and interact with the location further. Nonetheless, the allure of gaming can always entice players to keep playing and interact with travel agencies and locations more. In a virtual world, gamers typically seek out obstacles and strive for a sense of accomplishment. A well-made game can always entice players to keep playing and immerse them emotionally in the virtual environment. They may be motivated to keep playing by a variety of difficulties in order to receive rewards and recognition. Free vacations, lunches, and admission to sites are examples of rewards that might offer the challenge and inspiration to keep players interested and encourage return visits. According to Juul (2003) ^[23], intrinsic motivation plays a role in the game's flow. Extrinsic game play motives are associated with rewards and points, but intrinsic motivation is associated with social interaction and difficulty. Since tourists have previously visited the location, the combination of reality and imagination when thinking back on the trip can increase

their level of happiness, help them remember the place and motivate them to tell others about it.

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