

Framework for consumer engagement in tourism marketing: A gamification perspective

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Abstract

Gamification is applied as a digital marketing strategy in Hong Kong's tourism industry, where companies engage consumers by offering rewards and discount challenges. Several gamification studies highlight no significant results of positive behavioural changes when consumers are exposed to gamified features. Some travel companies have not considered the interplay between users' responses to the provided artefacts and the designers' creation of artefacts based on user needs. This oversight results in inconsistent outcomes in the application of gamification.

This research aims to establish a new theoretical framework, investigating which gamification affordances most effectively engage consumers by integrating affordance theory with structuration theory in the context of tourism marketing. This also suggests certain conditions to foster the effectiveness of gamification affordances for consumer engagement aids marketers to identify their online tactics in future empirical research.

Keywords: *Gamification, Affordance theory, Tourism marketing*

Track: Marketing Strategy & Theory

1. Introduction

The utilisation of gamification is overly expansive, potentially leading to ambiguity regarding its definition and practical application (Landers, 2019). Some gamification research suggest that while a significant portion of empirical studies show a positive influence on consumer engagement in gamification contexts, there are also instances where research demonstrates negative outcomes (Dichev & Dicheva, 2017; Maltrseva et al., 2019). This disparity indicates a gap between theoretical applications and empirical research due to the inconsistent utilisation of theoretical foundations. For example, some research focused on enhancing organisational outcomes rather than improving consumer satisfaction and experiences (Wolf et al., 2020); many emphasised increasing the gamification element use from service providers' perspectives without considering users' preferences (Xu et al., 2016). Moreover, some authors did not consider the significant role of technology use in online activities as a contextual factor that influences user behaviours (Abou-Shouk & Soliman, 2021).

Landers (2019) argued that many management professionals or designers merely create game-like elements to lead to interventions on users' actions. Designers often develop a product or an activity that gives the impression of being a game for user engagement to generate positive motivational outcomes. However, the lack of a common theoretical framework in the field of gamification contributes to the inconsistent results in its application.

This is evident in the case of the Hong Kong tourism market, where travel companies primarily focus on incorporating gamification elements, such as providing rewards and discount to persuade tourists without considering their needs of more personal and unique experiences (Kim et al., 2012). Mr. Cheng from the Hong Kong Tourism Board (HKTb) noted that Hong Kong still lags behind its competitors such as Japan, Singapore and Korea even though companies increase offering discounts and gamified elements in online platforms (HKTb, 2020). This research aims to develop a new theoretical framework from a tourism marketing perspective to identify effective gamification affordances and outline a pathway to achieving positive behavioural outcomes for Hong Kong tourism marketing. The insights into consumers' needs and behavioural outcomes can benefit marketers and designers in the tailoring of services and activities, to meet consumer interests and needs effectively. This should also bridge gaps in the existing studies with inconsistent gamification outcomes to comprehensively examine consumer behaviours.

2. Theoretical Framework Development

2.1 The expansion of gamification within affordance theory and structuration theory

Gamification is closely associated with the rewards and benefits that users actively seek. Common gamification elements like point scoring systems, leaderboards, and badges are employed to foster user motivation. Users are encouraged to achieve challenges or compete in activities to earn rewards, thereby enhancing their engagement. Koivisto and Hamari (2019) have developed a conceptualisation of gamification within the context of imposing affordances to motivate users. This conceptualisation indicates a potential affordance for gamification to influence user behaviour by inducing psychological changes through the facilitation of action possibilities (i.e. the range of behaviours a user can undertake within a gamification context).

The concept of affordance theory, developed by Gibson and Pick (2003), highlights the interrelationship between users, designers, and artefacts. Designers base their creations on users' needs to provide artefacts, and users respond to these artefacts in varying ways. This theory serves as the foundational basis for representing the structure of human action. The authors also mentioned its properties including: (i) it relates to the action capabilities of users; (ii) it is independent of an actor's ability to perceive it; and (iii) it does not change while the user's goals or needs change. It provides a structure for researchers to determine the factors which influence the capabilities of users taking actions, users' responses and attitudes, and the motivation of users in respect of specific affordances in activities. Affordance provides the possibilities for human action in given situations while individuals are capable of perceiving and achieving their goals/needs (Tomej & Xiang, 2020). It reflects the characteristics of an artefact that indicates how it can be used or operated. However, the operation may differ from the original design purpose or assigned purpose (Burlamaqui & Dong, 2015). The new operation reveals the action possibilities available to people. If an artefact is utilised differently from its assigned purpose, the affordances that it offers are likely to reveal its underlying potential uses. The way how users interact with artefacts determines the effectiveness of the design and the level of user satisfaction. The interaction highlights the pleasure derived from participation in activities. When users feel satisfied, artefacts are more likely to provide enjoyable and hedonic experiences, fostering greater user satisfaction and engagement.

Although the concept of affordance is applied to investigate how and why certain behaviours occur between users and a created activity, it has not emphasised the factor of how the individual technology use may affect the interaction between groups of users in online activities. Technology usage becomes complex as it is perceived by different users in different ways, especially in online environment. Users do not merely seek information but also the

experience of enjoyment and curiosity that leads to the change in interactions between users. If users continuously engage in the same technology practices, they become more knowledgeable. They may either keep doing or change their behaviour towards the same technology practice (Orlikowski, 2000). Structuration theory indicates that it is the 'technology-in-practice' reflecting certain uses of technology within a social structure of particular groups of users (Du et al., 2019). It emphasises that the importance on studying society changes requires to examine the interplay between individuals and the social rules (Giddens, 2013). Drawing upon online activities, users enact a new way of technology-in-practice, leading to reinterpretations of their needs and goals. In online tourism activities, while users regularly upload photos to collect bonus points, they may explore other ways to obtain rewards such as writing comments or sharing their travel experiences.

Structuration theory examines human actions within social structures, and how they shape these structures through technology use. Giddens (2013) illustrates how users can redefine technology applications individually through daily practices, and they form different structures of technology use in society. By analysing the factors impacting user behaviours through interactive affordance structures, a sociological perspective can reveal how technology shapes user actions. In contrast to the Technology Acceptance Model (TAM), which focuses on individuals' perceived usefulness in technology adoption, structuration theory enables researchers to examine how users' technology use evolves over time and how this influences social structures, going beyond the mere perceived usefulness of the technology. Therefore, the expansion on affordance theory through the lens of structuration theory underscores the significance of considering social interactions within technology use in society to identify the factors that influence users in online activities.

2.2 The theoretical concept of affordance theory on gamification

To integrate the concept of affordance theory and structuration theory, three factors of effective affordances design are constructed: (1) interaction, which indicates the relationship between artefacts, users, and designers that shape artefacts; (2) social factor, which considers the technology use in society; (3) cognitive ability, which involves users' perception of artefacts within an environment that is relevant to their needs and goals. Drawing upon the gamification context, they incorporate into three gamification affordances: (i) hedonic-based affordances, aiming to create engaging and enjoyable interactions that motivate participation; (ii) social affordances, pertaining to the social environment and how users respond to it; (iii) cognitive ability, representing users' or consumers' capacity for perception and interaction

within the environment; In addition, a reward-based affordance is also proposed, examining consumer behavioural outcomes in the context of tourists' online activities.

2.3 Self-determination theory in the gamification context and the development of a new theoretical framework

To measure the level of consumers' satisfaction needs, specifically self-determination theory (SDT) is employed for understanding human's motivation (Ryan and Deci 2000, 2020), encompasses three main psychological needs of humans seeking satisfaction, which are (i) autonomy (the need to have ownership over one's actions), (ii) competence (the need to achieve certain tasks to gain proficiency), and (iii) relatedness (the need to have a sense of attachment and belonging with others). Companies that create activities which can trigger people's intrinsic motivations can satisfy users' needs for autonomy, competence, and relatedness leading to an increase in their engagement intention (Deci & Ryan, 2000, 2012; Xi & Hamari, 2019). These three aspects are relevant when examining whether or not users (1) feel enjoyment; (2) feel achievement triggering their intentions; and (3) are influenced by others when participating.

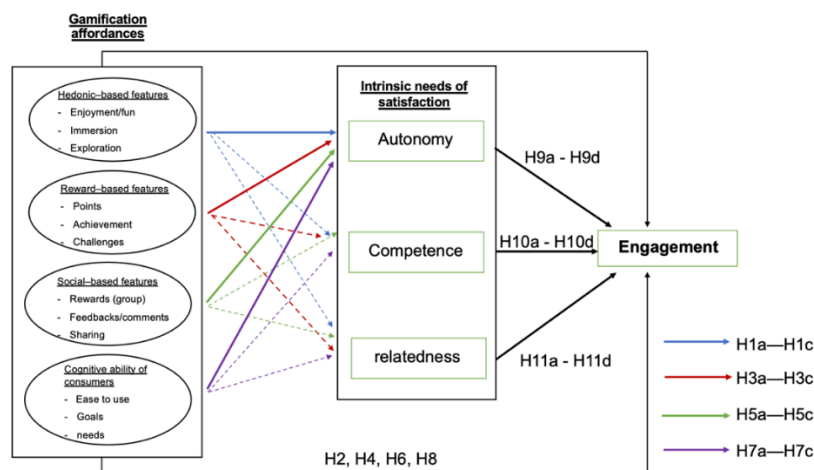
Autonomy signifies the internal drive to engage in a behaviour because of the satisfaction derived from participating in a particular activity. When people's behaviour is intrinsically motivated, their actions are self-directed, and the activities are engaging, allowing them to react spontaneously. When people's activities are controlled and they do not feel free to respond as they wish, self-efficacy decreases (Suh, Wagner, & Liu, 2018), and autonomy is not experienced (Hsu, 2022). However, if they receive negative feedback and consequences, their intrinsic motivation decreases (Deci & Ryan, 2000). There is ongoing debate about whether or not some individuals try harder to achieve tasks even when they receive negative feedback. Research has also shown that people tend to feel a sense of responsibility for their individual abilities, which can result in positive intrinsic motivation (Bitrián et al., 2021; Xi & Hamari, 2019). Thus, if people have strong intrinsic motivation derived from competence, they are likely to demonstrate a higher degree of engagement (Xi & Hamari, 2019). Interactions among users not only facilitate connections but foster a sense of belonging and self-expression (Hsu, 2022). Deci and Ryan (2000) indicated that intrinsic motivation may have a weaker impact on relatedness compared to autonomy and competence. When individuals are intrinsically motivated, they find themselves in situations where the need for social connection is not articulated. However, extrinsic motivation emphasises the importance of relatedness as a fundamental need for satisfaction, a concept that is internalised within individuals (Deci & Ryan, 2000). Despite being internally driven, individuals can be

influenced by external group behaviours, attitudes, or actions. A higher level of internalisation typically correlates with a greater degree of intrinsic motivation, reflecting their psychological need for satisfaction.

Many scholars have proposed using SDT to measure consumer satisfaction needs and intrinsic motivations in gamification contexts (Deci & Ryan, 2000; Deterding et al., 2011; Xu et al., 2016; Xu, Buhalis, & Weber, 2017). This approach is commonly used because SDT includes both internal and external psychological factors related to individuals' desire for autonomy and freedom, the demonstration of individual skills, and a sense of connection and belonging. This supports the use of SDT as a mediator to measure people's intention to satisfy their needs from a psychological perspective in a gamification context.

Based on the analysis of the literature review, the theoretical framework is constructed. Figure 1 presents the hypotheses in the theoretical model. The three gamification affordance factors include hedonic-based, reward-based, social-based features, together with the cognitive ability of consumers. There are proposed factors to examine which factors influence a higher level of satisfaction needs (H1a-H1c, H3a-H3c; H5a-H5c, H7a-H7c) and if they are significantly linked to engagement (H2, H4, H6, H8). Additionally, the hypotheses include testing whether the intrinsic needs of satisfaction (autonomy, competence, and relatedness) mediate the relationship between gamification affordances and engagement (H9a-H9d, H10a-H10d, H11a-H11d).

Figure 1. The theoretical framework



3. Conclusion

3.1 Theoretical implications

3.1.1 A new theoretical framework for gamification context

This research contributes to the literature by incorporating affordance theory into structuration approaches to expand the concept of gamification and identify a new theoretical

framework for examining consumers' intrinsic needs of satisfaction and engagement.

Affordance theory emphasises the investigation of specific artefacts that could enhance the relationship between users and features. The theory reveals how and why certain behaviours occur between them. Although its analysis of the relationship between users and artefacts is well-known, it overlooks that consumers' technology adoption is crucial for testing their abilities and behaviours online, which has not been emphasised within affordance theory before.

Importantly, affordance theory has been adopted in various contexts, providing different dimensions for analysing people's behavioural outcomes, including cognitive affordances, motivational affordances, and immersive affordances. This broadening of the theory supports and offers examples for investigating various affordances in a gamification context. The expansion of affordance theory can identify which factors influence consumer engagement that would not be found in the prior use of gamification theories such as the theory of planned behaviour (Ajzen, 2011) and flow theory (Csikszentmihalyi, 2002). These earlier theories focused on analysing how to create game-like elements to measure people's behaviours without considering the technology role in online activities.

The expansion of affordance theory offers the opportunity to identify and explore different affordances, supporting in the identification of effective gamification features for engagement. Through the integration of structuration theory, the framework further investigates the interplay between individuals and technology use online, as well as how consumer behaviours are shaped by social norms. This contributes to the development of a comprehensive structure for establishing the new theoretical framework in gamification contexts.

3.1.2 Expanding the concept of gamification

Some previous research on gamification emphasised an examination of various gamification elements which influenced user behaviours and reactions (Sailer et al., 2017). That merely emphasises how gamification elements provide different possibilities to examine consumers/users' behavioural satisfaction. Most importantly, affordance theory constructs the relationships that enable us to understand the conditions under which relations will or will not create effective designs of affordances.

Building upon the existing research, no studies to date have utilised hedonic-based affordances to examine psychology satisfaction needs and engagement. The hedonic-based affordance was developed as an additional implication to examine this aspect of gamification. It provides new insights that validate psychological theories of motivation and consumer

engagement. It serves the value of examining the intrinsic satisfaction needs (i.e., autonomy, competence, and relatedness) of end-users.

Although some past research has examined how playful experience is linked to effectiveness in engaging consumers (Xu et al., 2016; Hsu & Chen, 2018), they did not consider the relationship between users and activities, and whether consumers' needs and goals influence satisfaction needs in activities. Like, Wang, Sun, and Luo (2022) applied instrumental orientation and hedonic orientation as gamification affordances to examine their link to game purchase intention.

Indeed, this research not only investigates the impact of hedonic affordances on engagement but also reframes gamification as a platform for hedonic experiences, shaped by consumers' technology usage behaviours, goals, and needs. It introduces a conceptual framework for hedonic-based affordances within the context of gamification. Gamification can be applied in non-game contexts and is a type of 'playification', including the structure of goal-based play (Seaborn & Fels, 2015). This research suggests that the presence of hedonic-based features likely leads to a higher levels of satisfaction needs and engagement, distinguishing gamification from gaming. Furthermore, the study explores the concept of gamification to include the element of 'fun' in the dynamic relationship between users and activities during interactive processes.

The research contributes to strengthening the foundations of gamification research in the tourism context, encouraging researchers to further explore of the dynamic interplay between users and consumer technology adoption in the gamification process.

3.2 Managerial implications

Hong Kong travel companies primarily provide reward and discount to tourists without considering their individual needs and goals. This research is crucial for marketers and gamification designers, providing a foundation for conducting further empirical studies on the impact of hedonic-based affordances, reward-based affordances, social-based affordances, and consumers' cognitive abilities in designing online activities for effective engagement. It also proposes that the marketers, designers, and researchers can leverage the framework to expand the effectiveness of gamification design in the Hong Kong tourism market and prevent inconsistent designs that may lead to the failure of their online activities.

3.3 Limitations and recommendations

This study identified the theoretical framework for effective gamification affordances in the context of tourism marketing. However, it acknowledges certain limitations that future research can address. The implementation of this new theoretical framework identified is

exclusively focused on the tourism market within a gamification context. This narrow focus may limit the exploration of the broader significance of gamification affordances when applied to other contexts, such as branding and e-marketing. Future research could investigate its applicability in other domains to enhance the generalisability of the theoretical framework. Furthermore, future empirical studies should aim to validate the framework's effectiveness in examining gamification affordances in tourism marketing and provide insights into marketing practices across different countries and beyond.

Declaration of Competing interest

The authors declare that they have no conflict of interests.

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