



# How the Gamification Loyalty Program Affects Customer Behavior: A Literature Review

Ani Rakhmanita<sup>(✉)</sup>, Ratih Hurriyati<sup>(ID)</sup>, Vanessa Gaffar<sup>(ID)</sup>, Agus Rahayu<sup>(ID)</sup>,  
Lili Adi Wibowo<sup>(ID)</sup>, and Bambang Widjajanta

Faculty of Economic and Business Education, Universitas Pendidikan Indonesia, Bandung,  
Indonesia  
anirakhmanita@upi.edu

**Abstract.** A gamified loyalty program is a marketing tool used in a mobile app to promote repeat purchases and customer relationships and provide incentives through the game component. Several studies have explained the theory, characteristics, and results of conventional loyalty programs. A comprehensive review investigating the role of gamification in mobile application loyalty programs has not been carried out by any research and this is needed to help researchers and practitioners understand the concept of gamified loyalty programs. Data were taken from IEEE, Science Direct, Scopus, Emerald, Wiley, MDPI, and Springer published between 2010 and 2022 reviewing 32 selected articles by following Callahan's systematic literature review approach. This research contributes in defining a gamified loyalty program on a mobile application. Disclosing a gamified loyalty program is beneficial in enhancing the branded app experience, increasing branded app engagement, and increasing more active points redemption. Furthermore, the need for further research on what theories are used in gamified loyalty programs and the barriers to implementing gamified loyalty programs were also diagnosed.

**Keywords:** Consumer behaviour · Gamification · Loyalty Program · SLR

## 1 Introduction

Customer relationship management has the potential to enhance a company's growth in today's broad competitive environment. By knowing customers better it will be possible for the company to serve them right and keep them loyal forever [1]. Some researchers agree that loyalty programs can build loyalty in a heterogeneous group simultaneously. All businesses have realized to use various types of incentive rewards for customers, and plastic cards have long been used as a medium for delivering these rewards [2]. At the moment, customer relationship management has adopted a new way of increasing loyalty, as a result of the advent of the Internet and the continuous development of technology. Some companies continue to rely on loyalty card delivery media and others have switched schemes from card media to mobile applications. The advantages of loyalty programs through mobile applications are that they can increase portability, interactivity, and accessibility of loyalty points. Users can spend less time and effort viewing and managing loyalty points, as this information can be accessed instantly via one touch on the loyalty app [3].

© The Author(s) 2024

R. Hurriyati et al. (Eds.): GCBME 2022, AEBMR 255, pp. 788–795, 2024.

[https://doi.org/10.2991/978-94-6463-234-7\\_83](https://doi.org/10.2991/978-94-6463-234-7_83)

Given the increasing competition in the use of mobile apps, it allows users to easily switch between different apps, or own multiple apps and possibly uninstall them without reusing them [4]. For that, the company must offer added value to the application. One of the tools that can be used to increase the value of brand applications is gamification [5]. Gamification is a persuasive technological innovation in motivating people through entertainment and competition and increasing customer loyalty and interaction [6]. Gamification is not a serious game that applies game design with conflict resolution content [5]. Defines that gamification is the use of game design elements that involves a point system, the level of progress of each individual in participating in certain tasks in a non-game context. Like gamification, loyalty programs that have been used in customer relationship management for decades, also use a credit point system mechanism, or status advancement levels, such as loyal passenger status [7]. In contrast to the use of loyalty cards, gamification aims to unify the loyalty program with the latest innovations in game design. Game design elements to motivate and increase customers have attracted attention in digital marketing efforts. Gamification not only offers entertainment benefits but also leads to new cognitive, emotional, and social use experiences of core offerings [8].

Several studies have investigated the literature review regarding loyalty programs as an important instrument in marketing. However, the focus of previous research is the theoretical review on the characteristics of conventional loyalty programs over three decades [2] and [9]. Investigated a review of the understanding of the impact of loyalty programs on profitability for firms. Driven by the advancement of the internet and the rapid use of mobile devices, the practice of loyalty programs has grown. They imposed new challenges and created exciting opportunities for future loyalty program research. Many questions remain unexplored to identify the missing links in the literature and set the future research agenda to advance LP research and practice. Next, the need for further research on the role of loyalty program gamification in brand apps was also diagnosed. There has been no comprehensive review of that research reviewing gamified loyalty programs on brand apps. This paper is structured to fill in the existing research gaps.

## 2 Methods

The literature review method was used in this study to identify and discuss any and all relevant research for a particular question [10]. This literature review aimed at capturing the state-of-the-art in gamification loyalty programs as well as to document the important developments of their application to mobile applications. This study has three steps consisting of:

- (1) Developing research questions;
- (2) Creating a search string according research question;
- (3) Filtering to select the most relevant article.

The first step was to create research questions that will guide a comprehensive analysis and make it easier to gain insight into the research topic. To provide a good structure for this review, the authors follow [11] by using 4 W (What, Where, Why, and How).

Q1. What is a gamified loyalty program on a mobile app?

**Table 1.** Keyword search results

A1. Loyalty Program Gamification	B1. Definition	C1. Brand app
A2. Gamify Rewards Program	B2. Concept	C2. Cellular Apps
A3. Loyalty Gamified	B3. Usefulness	C3. Smartphone
	B4. Effect	C4. Consumer behavior
	B5. Benefits	C5. Perceived value
	B6. Determinant	
	B7. Affecting factor	

Q2. How does a gamified loyalty program affect customer behavior?

Q3. What are the perceived value dimensions of the loyalty program?

The second step was to design the research process. The searching process was carried out by creating a search string according to the research question and identified key terms, synonyms and related words Table 1. Shows the items associated with some of the search strings used.

The third step after generating the search string keywords, the relevant libraries were selected to implement the search string. A variety of well-known individual databases and web journals in the field of computer science and marketing, including, IEEE, Science Direct, Scopus, Emerald, Wiley, MDPI, and Springer were used limited to the period 2010–2022. There was a filter step to select the most relevant articles. Criteria were set for evaluation and identification with related topics. Eligible criteria for the search were articles written in English, if it is to be published in conferences and journals, this paper must provide empirical evidence on the impact and outcomes of loyalty programs on app brands.

Figure 1 represents each filtering process. The first search step was performed based on a predefined search string. Then the search results were filtered by applying the criteria and any studies that did not meet the criteria were deleted. Selected papers were stored in excel software and compiled based on the research library. In the next stage, the paper was analyzed based on the title, keywords and abstract. Any duplicates were removed. The last stage was reading and reviewing the content and the conclusion section. As many as 32 articles passed and met the criteria from all stages of selection.

### 3 Results and Discussion

In this section, 32 articles that have been reviewed and passed the quality assessment were described. These results answer the research question by identifying and explaining what a gamified loyalty program is, what the role of gamification in a loyalty program on a brand app is, and what the perceived value factors of the loyalty program are. The gamification loyalty program looks intuitively appealing, in which a coherent understanding is essential for further analysis.



**Fig. 1.** Selection Process

### 3.1 Definition of Gamified Loyalty Program

Of the 32 selected papers, none of them attempted to draw a direct relationship between gamification, loyalty programs, and brand apps. From the selected articles, the definition of gamification loyalty program found in the article was reviewed and identified, in which there were at least two thought concepts of the gamified loyalty program [12]. Defines a gamified loyalty program in his research as a record that provides incentives for consumer purchases through the game component. The goal is to increase the effectiveness of a loyalty program. In this study, gamification is recognized as one of the efforts to generate greater consumer loyalty to conventional loyalty programs. Gamification offers an experience in the success of loyalty programs. In other words, the gamified loyalty program is a reinvention of the conventional loyalty program that implements a new and interesting component. Furthermore, gamified loyalty programs drive consumer responses to the intention of downloading mobile apps.

The second definition of loyalty programs is a very new marketing communication strategy that aims to unify loyalty programs with the latest innovations in game design. The advantage of a gamified loyalty program for companies is the ability to provide entertainment and interaction in building brand loyalty [13]. Games are an important recreational activity carried out by many people and are able to spread globally in a relatively short time. In this study, it can be concluded that gamification can influence tourists' attitudes towards brands, where games composed by combining brands will affect brand image positively, and as a final result are likely to benefit from competition.

From these two definitions, it can be concluded that a loyalty program is an incentive system that provides an interesting and entertaining experience with game design in building customer engagement and loyalty.

**Table 2.** The role of gamification in loyalty programs

Benefit	Article
Maintaining customer loyalty	[12–14]
Improving customer experience	[15–18, 18–21]
Increasing customer engagement	[22–25], [26], [27]
Increasing the frequency of purchases and more active point exchange	[3, 28],
Giving pleasure	[29][13, 22]

### 3.2 How Gamification Loyalty Program Affects Customer Behavior?

Gamification loyalty programs have evolved with advances in technology and increased in number and popularity, but their impact on customer behavior remains nebulous. This paper synthesizes the current knowledge related to the role of gamification in promoting the effectiveness of loyalty programs. Several advantages of gamified loyalty programs were found from several studies. A summary of the role of gamification in the loyalty program can be seen in Table 2.

There are many benefits to be gained from implementing gamification in loyalty programs. It can improve customer experience, increase customer engagement, increase purchase frequency as well as more active redemption and customer enjoyment because the nature of the game is engagement and entertainment. In building a good gamification loyalty program, designing easy-to-use and interactive gamification designs has become a profitable way of engaging customers, making tedious and repetitive activities more enjoyable. Gamification in loyalty programs facilitates consumer engagement to foster lasting psychological and emotional bonds with their customers [30].

### 3.3 Dimensions of Perceived Value of Loyalty Programs

When customers decide to join a loyalty program, they weigh the perceived cost with the perceived value. Loyalty program costs must be sacrificed, such as the cost of time sacrificed while accumulating points, and maintaining the app without deleting it. Meanwhile, perceived value can take various forms. Table 3 shows the dimensions of perceived value of the gamification loyalty program that were found from selected articles.

After a customer joins a loyalty program for some time, the perceived value of the loyalty program no longer affects his behavior directly. On the other hand, perceived value

**Table 3.** Value Dimensions in Loyalty Programs

Value Dimension	Indicator	Reference
Functional Value	clear purpose, ease of use, usefulness	[13, 14, 19, 31]
Emotional Value	Value fun, competence	[13, 15, 21, 24, 27, 32]
Social Value	linkages	[14, 22, 33, 34]

will affect customer attitudes and feelings [35]. Therefore, loyalty program providers should carefully design the loyalty program design to increase attractiveness.

## 4 Conclusion

This systematic review looks for ways to link the two disciplines of study, gamification and customer relationship management, particularly in loyalty programs. It provides help for the further research plan in the area of gamification loyalty program research. There is a strong and clear link between gamification and loyalty programs, which suggests that gamification can help in making loyalty programs more enjoyable and interesting. When designed and used properly, it can improve customer experience, engagement, and satisfaction. The scientific novelty of this research lies in the formulation of the definition of the gamification loyalty program and the categorization of the perceived value of the gamified loyalty program, which can be used as a frame of reference for future research.

## References

1. Khalid Rababah, Haslina Mohd, H. I. Customer Relationship Management ( CRM ) Processes from Theory to Practice : The Pre-implementation Plan of. *Int. J. e-Education, e-Business, e-Management e-Learning* (2011).
2. Chen, Y., Mandler, T. & Meyer-Waarden, L. Three decades of research on loyalty programs: A literature review and future research agenda. *J. Bus. Res.* **124**, 179–197 (2021).
3. Son, Y., Oh, W., Han, S. P. & Park, S. When loyalty goes mobile: Effects of mobile loyalty apps on purchase, redemption, and competition. *Inf. Syst. Res.* **31**, 835–847 (2020).
4. Vagrani, A., Kumar, N. & Ilavarasan, P. V. Decline in Mobile Application Life Cycle. *Procedia Comput. Sci.* **122**, 957–964 (2017).
5. Deterding, S., Dixon, D., Khaled, R., & Nacke, L. From game design elements to gamefulness: Defining ‘gamification’. *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, MindTrek 2011* 9–15 (2011) <https://doi.org/10.1145/2181037.2181040>.
6. Blohm, I. & Leimeister, J. M. Gamification: Design of IT-based enhancing services for motivational support and behavioral change. *Bus. Inf. Syst. Eng.* **5**, 275–278 (2013).
7. Meyer-Waarden, L. The influence of loyalty programme membership on customer purchase behaviour. *Eur. J. Mark.* **42**, 87–114 (2008).
8. Zichermann, G. & Linder, J. Game based marketing: Inspire customer loyalty trough rewards. *Game-based Mark.* 240 (2010).
9. Dorotic, M., Bijmolt, T. H. A. & Verhoef, P. C. Loyalty Programmes: Current Knowledge and Research Directions. *Int. J. Manag. Rev.* **14**, 217–237 (2012).
10. Cooper, I. D. What is a “mapping study?” *J. Med. Libr. Assoc.* **104**, 76–78 (2016).
11. Callahan, J. L. Writing Literature Reviews: A Reprise and Update. *Hum. Resour. Dev. Rev.* **13**, 271–275 (2014).
12. Xu, F., Tian, F., Buhalis, D., Weber, J. & Zhang, H. Tourists as Mobile Gamers: Gamification for Tourism Marketing. *J. Travel Tour. Mark.* **33**, 1124–1142 (2016).
13. Hwang, J. & Choi, L. Having fun while receiving rewards?: Exploration of gamification in loyalty programs for consumer loyalty. *J. Bus. Res.* **106**, 365–376 (2020).

14. Rodrigues, L. F., Oliveira, A. & Costa, C. J. Playing seriously – How gamification and social cues influence bank customers to use gamified e-business applications. *Comput. Human Behav.* **63**, 392–407 (2016).
15. Bauer, J. C., Linzmajer, M., Nagengast, L., Rudolph, T. & D’Cruz, E. Gamifying the digital shopping experience: games without monetary participation incentives increase customer satisfaction and loyalty. *J. Serv. Manag.* **31**, 563–595 (2020).
16. Hsieh, S. H., Lee, C. T. & Tseng, T. H. Branded app atmospherics: Examining the effect of pleasure–arousal–dominance in brand relationship building. *J. Retail. Consum. Serv.* **60**, 102482 (2021).
17. Hsu, C.-L., Chen, Y.-C., Yang, T.-N. & Lin, W.-K. Do website features matter in an online gamification context? Focusing on the mediating roles of user experience and attitude. *Telemat. Informatics* **34**, 196–205 (2017).
18. Hsu, C.-L. & Chen, M.-C. How does gamification improve user experience? An empirical investigation on the antecedents and consequences of user experience and its mediating role. *Technol. Forecast. Soc. Change* **132**, 118–129 (2018).
19. Hofacker, C. F., de Ruyter, K., Lurie, N. H., Manchanda, P. & Donaldson, J. Gamification and Mobile Marketing Effectiveness. *J. Interact. Mark.* **34**, 25–36 (2016).
20. Merhabi, M. A., Petridis, P. & Khusainova, R. Gamification for brand value co-creation: A systematic literature review. *Inf.* **12**, (2021).
21. Huotari, K. A definition for gamification: anchoring gamification in the service marketing literature. *Electron. Mark.* **27**, 21–31 (2017).
22. Suh, A., Wagner, C. & Liu, L. Enhancing User Engagement through Gamification. *J. Comput. Inf. Syst.* **58**, 204–213 (2018).
23. Hamari, J. Do badges increase user activity? A field experiment on the effects of gamification. *Comput. Human Behav.* **71**, 469–478 (2017).
24. Högberg, J., Ramberg, M. O., Gustafsson, A. & Wästlund, E. Creating brand engagement through in-store gamified customer experiences. *J. Retail. Consum. Serv.* **50**, 122–130 (2019).
25. Bitrián, P., Buil, I. & Catalán, S. Enhancing user engagement: The role of gamification in mobile apps. *J. Bus. Res.* **132**, 170–185 (2021).
26. Yang Asaad, Y. and Dwivedi, Y. Y. Examining the impact of gamification on intention of engagement and brand attitude in the marketing context. *Comput. Hum. Behav.* Vol. 73, pp. 459–469 (2017).
27. Li, X., Su, X. & Wang, Y. C. Experiential branded app engagement and brand loyalty: An empirical study in the context of a festival. *J. Psychol. Africa* **30**, 417–426 (2020).
28. Hamari, J. Transforming homo economicus into homo ludens: A field experiment on gamification in a utilitarian peer-to-peer trading service. *Electron. Commer. Res. Appl.* **12**, 236–245 (2013).
29. Xu, F., Buhalis, D. & Weber, J. Serious games and the gamification of tourism. *Tour. Manag.* **60**, 244–256 (2017).
30. Al-Zyoud, M. F. The impact of gamification on consumer loyalty, electronic word-of-mouth sharing and purchase behavior. *J. Public Aff.* **21**, (2021).
31. Harwood, T. An investigation into gamification as a customer engagement experience environment. *J. Serv. Mark.* **29**, 533–546 (2015).
32. Sailer, M. The Gamification of Learning: a Meta-analysis. *Educ. Psychol. Rev.* **32**, 77–112 (2020).
33. Sailer, M., Hense, J. U., Mayr, S. K. & Mandl, H. How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. *Comput. Human Behav.* **69**, 371–380 (2017).
34. Hsu, C.-L. & Chen, M.-C. How gamification marketing activities motivate desirable consumer behaviors: Focusing on the role of brand love. *Comput. Human Behav.* **88**, 121–133 (2018).

35. Steyn, P., Pitt, L., Strasheim, A., Boshoff, C. and Abratt, R. A cross-cultural study of the perceived benefits of a retailer loyalty scheme in Asia. *J. Retail. Consum. Serv.* 17, pp. 355–373. (2010).

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

