

Applied Gamification to Enhance Customer Loyalty for Fintech Industry

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Abstract— In this study, a mobile application prototype for fintech industry is proposed which aims to address users' problems and engage them based on incentivized mechanism through applied gamification used for the users. Users will perform transactions and in return get some points as rewards, which they can use for cashback rewards or send these points to someone they want. For this research, Figma is used as a tool for designing wireframes and prototypes which later included in UseBerry to perform usability tests from users to collect their responses. Around 50 participants have been invited to collect their responses based on using the prototype and answering a few questions based on that. Results have shown an enormously positive response from users who really want to get incentives through their daily transactions and can get whatever benefits they are provided. However, this research is limited to a few features and more features and testing can be done based on the current response from the users which will directly impact user's daily life and improve conversions for the banking and fintech industry.

Keywords— Gamification, Customer Loyalty, Banking Industry

I. INTRODUCTION

This research intends to show how the fintech industry is evolving and retaining their customers by using the gamification and game psychology for rewards system. Gamification turns everyday financial tasks to reward-type activities and milestone tasks. There are many fintech giants on the world who are advancing with improving their user

experience on daily basis and they have the best customer retention and loyalty system. In Pakistan, fintech industry is on the verge of evolution and there are several great banks and neo-banks who have built millions of customer-bases, but they don't have introduced any rewarding system related to gamification. This intended research discusses the

importance of gamification, and a prototype is designed for the users which will help them get the loyalty points based on any activity or any transaction they do with the platform. Their responses will get collected whether this loyalty points feature is helpful to them or not. This study will ultimately try to conclude how much necessary is it to build a loyalty system for generation more revenue with the fintech industry.

II. LITERATURE REVIEW

This study [1], which was based on the Self-Determination Theory (SDT), looked at how rewards might reduce people's intrinsic motivation to use a store loyalty program. There were two experiments done. Study 1 showed that people who got a salient reward (a reward with a clear prerequisite and deadline) Individuals who received non-prominent rewards showed a higher level of intrinsic motivation to engage in the loyalty program compared to those who received its salient rewards. (i.e., success and no reward options). Counterpart (a fewer specific criterion, no deadline, and incentive possibilities) In Study 2, it was found that utilizing a gamified approach to present the main incentive, which involved less explicit requirements, no fixed deadline, and a variety of reward options, helped enhance intrinsic motivation compared to presenting it in a more traditional way. This enhancement was further facilitated by providing graphical feedback. It has implications for creating loyalty program that work. Work done by Linda D. et. al. from [2] shows that several studies have been conducted or reviewed regarding loyalty programs, gamification and consumer engagements which have supported the concept through generating prominent insights. To begin, they extended the customer engagement literature by defining GLP engagement (GLPE) as members' Behaviors related to GLP that are manifested through either direct actions, such as purchasing, or indirect efforts, like

participating in GLP-related training, which they asserted are crucial to GLP effectiveness. Second, they created a self-determination theory-based framework that proposes members' interest and motivation as major drivers of GLPE. This process, in turn, impacts the value of customer brand engagement (CBEV). Thirdly, they create connections within the framework by formulating a set of assumptions that will serve as a foundation for future research on GLPE. The study is concluded by discussing the significant implications arising from this research. Jiyoung Hwang and Laee Choi proposed their research in [3] showing how loyalty programs can have a valuable impact on customer's behavior and intentions. Their study was limited to U.S. customers having loyalty programs made for mobile phones. Impressive results were shown that customers have increased loyalty for the loyalty programs designed for mobile apps than those having none. Gamification have served the purpose of increasing engagement level and playfulness with using the app. Their findings are supporting the role of gamification in the mobile applications having increased revenue for companies enhancing their loyalty programs.

Sheharyar Muhammadi has shown how important is the gamification to be included in the loyalty programs because there are over 40% consumers who discontinue with the loyalty programs resulting in loss of revenue according to this study. For that, gamification is the main thing to retain the customers and motivate them. Various sources of information have been used here such as interviews as primary data and secondary data pertaining to articles, books, etc. It consists of theoretical and practical parts where theoretical one focuses on examining different types of gamifications and the practical one focuses on how to make users retain to complete certain action and provide them with reward. The results had the positive response of engagement of the customers with gamified loyalty programs [4].

Ooi Wei Xin et al. [5] studied the effectiveness of Starbucks' loyalty program and tier system, which includes a gamification system, in retaining customers. The study found that customers who earned points through the gamified experience were more motivated to receive rewards and explore the tier system. The research team additionally formulated a model to investigate how the gamification of mobile money payments could create value for customers by means of its social influence. They collected data from 567 mobile money payment users in Ghana and employed structural equation modeling for analysis. The results of the analysis demonstrated a positive and substantial connection between gamified mobile money payments and the theory of social impact. [6]. This study uses a quantitative approach, distributing surveys to 425 Go Club users in Indonesia and analyzing the results using partial least squares structural equation modeling[7]. In this study[8], To examine a set of hypotheses and confirm the suggested model, we applied partial least squares structural equation modeling. The foundation of this model is rooted in the stimulus-organism-response (S-O-R) approach. This study employed the systematic literature review (SLR) method to identify the prerequisites and standards for designing gamified user interfaces (UI) and user experiences (UX) in e-learning that harmonize with the demands of

users and the educational standards of Madrasah Ibtidaiyah. [9]. Systematic Literature Review (SLR) is a systematic procedure for discovering, assessing, and comprehending all accessible research materials related to a particular subject with the intention of offering responses to targeted research inquiries. This article explores the impact of discussions concerning the transfer of generational wealth, which can generate uncertainty within the finance industry. In response to this uncertainty, financial incumbents may attempt to mitigate it by advocating a model of human nature that can be harnessed and controlled through gamification, with the aim of influencing individuals' financial behavior.[10]. This study used a quantitative approach with a questionnaire to collect data from 325 active m-wallet users who had used the service for at least one year. The results showed that all the hypotheses were supported. A purposive sampling technique was used to determine the sample[11]. This study uses partial least squares structural equation modeling (PLS-SEM) to examine the adoption of gamified mobile payment platforms in developing countries. The sample consists of 388 online users, and the results have implications for strategies to promote the adoption of these platforms by "ensuring convenience" and "assuring security" [12]. This study uses a descriptive, quantitative approach and a purposive sampling technique to survey 108 respondents. Data is gathered through online surveys and then subjected to analysis through the application of structural equation modeling, using the Smart PLS 3.0 software. [13]. This paper compares the interface designs of three major brokerage platforms and finds that they do not incorporate game-like elements. Because of the lack of empirical evidence for the gamification hypothesis, the paper suggests exploring the autotelic (self-motivated) logics of play that emerge between users and media objects instead[14]. In this paper, an extensive gamification mechanics framework consisting of eight elements is introduced. These elements encompass aspects like significance, achievement, possession, rarity, utilization, social impact, unpredictability, and evasion. Each of these elements is elaborated upon in a thorough manner. Including how it appears in games and in business or workplace settings, and its relevance. The framework is specifically designed for the e-commerce industry, and each element is developed considering both gaming and non-gaming contexts in a business or workplace environment.[15]

III. METHODOLOGY

For this research, user interviews and surveys will be conducted from a large group of diverse users based on the prototype designed for the fintech loyalty programs enhanced with gamified experience provided to users. User interviews and surveys will be conducted from the participants involved in fintech industry, banking sector of Pakistan, students and those who use mobile banking for their daily life transactions.

A. Designing Prototype

1) Defining User Goals

For this study, we will be designing the prototype including the loyalty rewards and gamification system with that. Designs and user flows will be taken from the existing banking apps like HBL, UBL, etc., and neo-banks like SadayPay, NayaPay, etc. Points will be generated when the user perform any transaction like sending money or purchasing, paying utility bills, etc. Those points will be used for getting any rewards like providing free ATM transactions, getting mobile MBs, coupons or vouchers, etc. According to user experience (UX) point of view and for gamified experience for users, the progress bar will be added on the rewards dashboard which will indicate that if user reaches to X goal, he will be rewarded Y points. Later, user can use those points to collect their rewards and even transfer or convert their rewards to currency (PKR).

2) User Interface

Figma software is used for wireframing and prototyping. All the necessary components are designed based on the existing banking apps considering human interface guidelines or material guidelines for apple or android. User flows are considered from existing applications and will identify where we can implement the separate section for reward system which will be having all other features like get rewards, earn points, or check rewards, etc. Finally, the fully-fledged prototype is integrated with the UseBerry web application where the tasks are dedicated for the users to generate user's touch points through heatmaps and journeys. Also, several other metrics will be taken into consideration.

Following above are a few vital screens designed for users to collect their response.

B. User Interviews and Surveys

First, the participants will be shared the prototype through UseBerry where they were provided with gamified tasks to achieve their desired goal and earn rewards based on that. Their responses will be recorded and based on that this research will be informed about what the user expects from this design.

First, the participants are shared the prototype through UseBerry, where they are provided with three tasks to accomplish and get their reward or use it my means of points. Their responses are recorded and based on that this research has been informed about what the user expects from this design.

1) Task 1

“Complete the daily challenge and earn points”

In this task, the user is supposed check for section “Earn Points” and complete the challenges that will be shown right below on the screen. For this research the challenge taken for user is about sending money to anyone and get points as rewards in return.

2) Task 2

“Transfer your points to anyone”

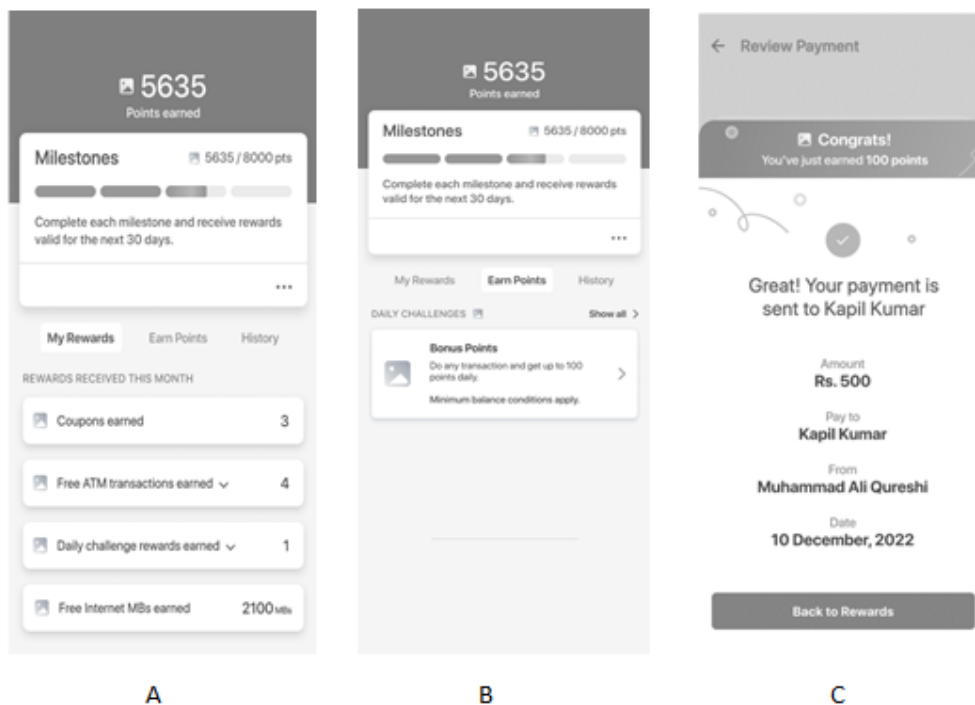


Fig. 1. Showing the key screens designed for the research

On the dashboard where user is seen the milestones, user will click the menu dots and as the bottom sheet appears, he will click on the “Transfer points”. From there, user will be able to select any recipient and select any number of points to transfer to that person.

3) Task 3

“Convert Points to Rupees”

From this task, user will be able to utilize the earned points by converting it to rupees or anything as in rewards offered by the system. User will enter amount in points and be able to convert it according to the standards applied by the system.

After completing all the tasks, participants were asked a few questions related to feedback. Following are the questions asked:

- How was your experience?
- Did you understand the tasks?
- Do you think these types of features are necessary and should be implemented?
- If you get these features in one of the banking apps, do you think you will use it?
- How did you found the overall look and feel of the design?

However, there were 50 participants were selected from university students, banking sector employees and common individuals using such applications. Whereas, from the UseBerry application, we have only recorded 15 responses due to application’s limitations for freemium use.

IV. RESULTS

Participants have provided enormous and positive response by fulfilling these 3 tasks. The users who have dropped-off the tasks or were unable to understand what to do next due to the prototyping were 20% and otherwise 80% users have successfully completed the tasks as provided. Average time taken by participants was 2.5 minutes which is again great in terms of three tasks.

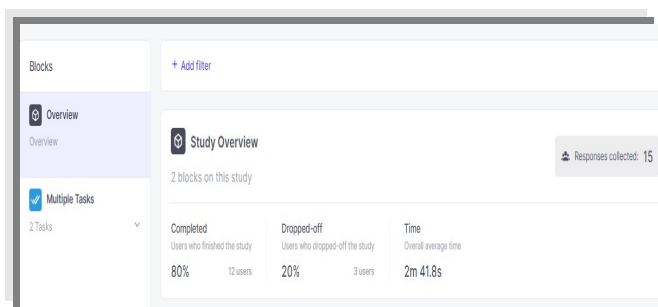


Fig. 2. Overall metrics of tasks as performed by users.

From the below figure, we can check that around 80% users have completed the study where 20% were unable to complete. The reason behind is because of the limitations of

the prototype because not everyone is familiar with the mobile prototypes being used and clicked with the desktop screens.

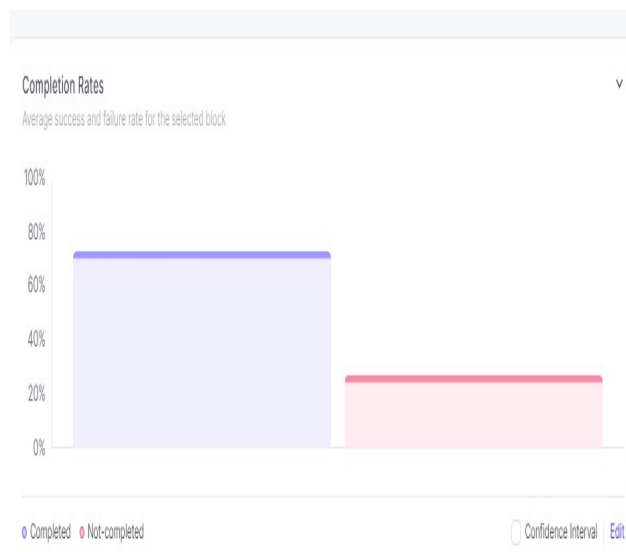


Fig.3. Showing the completion rates performed by users.

From Fig. 4., Most of the users have completed the tasks in 1.5 minutes and the average of all the users is making it up to 2.5 minutes of study. There are reasons that at first, user is stilled and wondering what it is and what is he supposed to do now and next. Again, the numbers are quite positive and supportive.

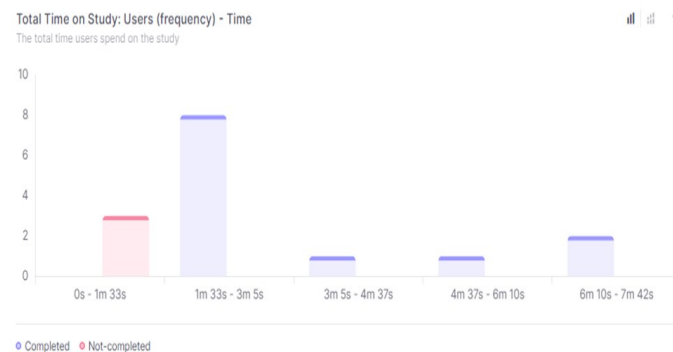


Fig. 4. Showing the total time spent on tasks by users.

After all the results, most of the users have collected their responses for the questions asked from them, where 45% users say that they found it really very useful to get incentive and use the application for further in future. 35% users say that they like the gamification strategy used in the app and endorsed it in future for banking and fintech industry. However, 20% users still wondering what are the other benefits that can achieved with such features.

Overall, the research has accomplished the purpose for applying gamification and loyalty rewards system will be beneficial for getting daily life incentives for users and higher conversion rates for the companies and to retain their users as well.

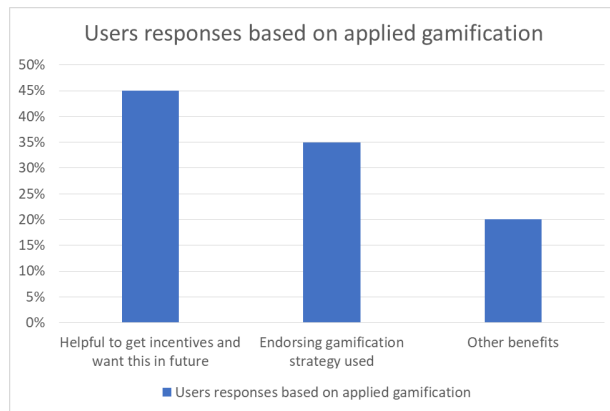


Fig. 5. Participants' responses based on using the prototype.

V. CONCLUSION

This research targets the gamification and loyalty rewards system for the users who can get benefits from these features and become loyal to those applications who continuously working on gamification and points system in the banking applications. Prototype for the users have been designed where they accomplished tasks based on that where they collected their positive and constructive responses. Most of the users want to get incentivized through daily life transactions and either way it is important for the fintech companies as well to maintain their loyal customers and increase user retention through high conversions. Moreover, this research poses certain limitations like not having more features for paying for their bills and getting rewards, also actualizing the scenarios by sending or receiving on daily basis. But their responses are equally important to further enhance this research and develop the features for banking sector and fintech industry in Pakistan.

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