

The Effect of Efficiency and Attitude to the Use of Gamification on the Customer Behavior in the Banking Industry of Iran (Case Study: Mellat Bank Branches, the city of Shahroud)

Sajjad Golian^{1*}, Neda Ghasemi²

¹MSc, Financial Business Management, University of Tehran, Iran. ²MSc, Psychology, University of Gonbad-e Kavous, Iran.

*Corresponding Author:

Abstract: One of the most important advantages of organizations is their effect on the customers' behavior. Therefore, organizations are always looking for ways to maintain their customers using these methods. Using gamification is a method in which the application of the techniques and game elements for non-game purposes increases customer motivation for voluntary participation in desirable organization activities as well as improving their behavior. The dimensions of the gamification have the essential role in achieving this goal; therefore, the purpose of the present study is to investigate the effects of two Gamification aspects of performance and attitude on customer behavior of Mellat Bank in Shahrood city. This research is practical in terms of purpose and is descriptive-survey in terms of nature; In this way, the library method was used to collect information about the subject's background and researcher-made questionnaire with acceptable and appropriate reliability and validity that it needed to collect the necessary data with the aim of testing research hypotheses. Regarding the research purpose, the statistical population of this study is customers of selected branches of Mellat bank in Shahroud city and the method was random cluster sampling. Regression coefficient and meaningful level were used to test the hypotheses. The results of the research show that the dimensions of performance and attitude of the Gamification strategy have a significant and positive effect on the behavior of customers of selected branches of the Mellat Bank.

Keywords: Efficiency, Attitude, Gamification, Customer Behavior, Banking Industry

INTRODUCTION

The goal of strategies and resources is creating attractiveness and retaining the customers and the key factor in the banking industry is clients. This is also considered a strategic challenge. The service sector is one of the main sectors of every country's economy and banks as service organizations play an important role in the country's economic growth and development. Banks can rely on customers' satisfaction and encourage them to save and grow capital accumulation. Using this investment in manufacturing and consuming industries, they will influence economic growth. The gamification is an innovative technology that uses game design elements for motivating people' particular behavior in non-recreational environments. These users can be stakeholders within the organization, consumers of products and services, individuals or groups. The gamification is an innovative method that not only helps organizations attract customers but also improves customer behavior and activate participation of potential clients (Singh, 2013). The purpose of this study was to investigate the effect of the attitude and the use of Gamification on customer behavior in the banking industry of Iran.

Theoretical Principles and the background of the research

The concept of Gamification

In recent years, the rapid expansion of multiple software with video game attitude has given special attention to a term called " gamification " and it has become one of the most attractive and challenging issues in business management. The gamification involves the use of game design elements in a non-recreational field. In fact, the game gamification is not a complete game and it only includes a number of game design elements that seem effective in the field (Deterding, 2011). The game quickly entered other practical and academic fields and this trend continues. Gamers are voluntarily spent solving problems in different games using their skills and develops the personality capabilities, including perseverance, creativity, and flexibility in expanded games (Zichermann et al., 2011). The gamification tries to recruit the motivational power of the game and use it to solve the real-world problems. Considering the wide range of advantages of this concept, it is not surprising that companies with different dimensions and in different industries, based on the use of the principles of the game, have gained much power in developing products, communications, and processes and the game is growing at companies with an influential rate (McGonigal, 2011).

Elements of the game

Game elements is a toolkit that can be combined to make any kind of game in different ways. Professor Verbach offers a framework in which the components of the gamification are grouped into three groups:

A. Dynamics, 2. Mechanics, 3. Components (Werbach et al., 2012).

Dynamics: The dynamics or the foundations of the game are at the head of the pyramid, they are the most abstract elements represent in the game. In fact, Verbach likens them to grammar or hidden rules. Based on this model, the dynamics are Pressures, emotions, tradition, progress, and relations (Werbach et a., 2012).

Mechanisms: Mechanisms or game stimuli are the next levels of the pyramid that stimulates specific behaviors that guide and encourage players to perform the desired activity. According to Verbach, these mechanisms are Challenges, Luck, Competition, Collaboration, Feedback, Earnings, Rewards, Deals, Shares, and Winning Terms. Ziecherman statement regarding about the difference in mechanisms and dynamics is: Drivers are the tools for building games, while dynamics are how the user interacts with the game experience (Werbach et al., 2012). Incentives are tools for making games; While dynamics are how the user interacts with the game experience (Werbach et al., 2012).

Components:

Components that are at the lowest level of the pyramid, they don't just make the game; but also has the role of tangible or semi-tangible elements of the game which facilitates the play. According to Verbach, these components are Avatars, collections, fighting, unlocking game content, giving presents, ranking tables, concession stages, missions, social charts, teams and virtual goods (Werbach et al., 2012).

Customer behavior

Customer behavior is one of the new topics in the field of marketing. While the history of using this concept goes back to the years ahead but the first book on this subject was written in 1960. As an example; It is possible to refer that in 1950 Freud's ideas were used by marketers. Customer behavior is a controversial and challenging topic Which includes people and what they use, Why and how to will choose and also includes marketing, marketing mix, and market (Conjeo, F. (2014).

Wilky and Salmon defined customer behavior as The physical, emotional and mental activities that individuals make when choosing, buying, using and disposing of goods and services to meet their needs and

desires. In another definition, customer behavior is described as A set of activities that directly deal with the acquisition, consumption, and disassembly of goods and services. These activities include the decision-making process before and after these actions (Singh, 2013).

Research background

- 1. Beatner & Shiper (2014), came to the conclusion that: Among factors, approach, Subjective norms, and perceived control weren't the result of an intention to purchase Gamification products and attitude and performance lead to intent to purchase Gamification products and affect it.
- 2. Dörtding et al., (2011) through an article explained that successful game will use elements of game design in non-gaming contexts. In their view, only one of the design elements of the game is used which appear to be effective in the context in which they are intended, and this method does not include the design of a complete game.
- 3. Zicherman and Cunningham, (2011) focusing on behavioral psychology and social games in recent research and they describe the game as the game-centric thinking process and game mechanisms that have been defined to engage users in solving problems.

Research method

This is a practical research because the results were used to improve and restructure the banking system and customer behavior. Also, by nature, it is a descriptive-survey. In this research, library sources such as books and scientific journals were used to compile information on the background and resources to test the research hypotheses, Also, to test the research hypotheses and collect the necessary data, a researcher-made questionnaire was used. To determine the reliability of the questionnaire, Cronbach's alpha tested, and Cronbach's alpha coefficient was 0.97 and since the resulting alpha value was more than 0.7, the reliability of the questionnaire was confirmed. Which results in Cronbach's alpha coefficients and each of the research variables that is shown in Table 1.

The statistical community of this study were customers from selected branches of Qavamin Bank in the city of Shahrood. The sampling method was random cluster sampling method. To obtain sample variance, a preliminary study was conducted Because the variance of society was unclear. In this field, a random sample was selected, then a questionnaire was distributed among them. In primary sampling, 50 questionnaires distributed between customers and the standard deviation was 541/0, and by adding it to the formula the required number of samples with 95% confidence and at least 325 were obtained. In total, 325 questionnaires have been distributed and finally, 310 valid questionnaires were used as the basic source for the research.

Table 1. Variables and Oronbach Alpha coefficients							
ariable	Dimensions Cronbach's alpha		Indicators (Operational definition)	Sources	Sources of Inquiries		
Gamification	Efficiency	0.83	Increasing the amount of achievement of your capital goals encourages you to use this bank.	Ebrahim Nezhad (2010)			
			Providing relevant information about the status of your accounts makes sure that you are using this bank.	Nibiu and Ado (2014)	1-4		
			Increasing your learning about financial issues and various ways of capitalizing has been able to attract you to Shahrood Bank.	Helden and his work (2010)			
			Improving the quality of providing your banking services has encouraged the use of bank services.	Helden and his work (2010)			
	Approach	0.80	The idea of using the services available at the Ghavamin Shahroud Bank customers' club is a good idea.	Nibiu and Ado (2014)	5-8		
			The idea of using the services available at the	Sheikh Sha'ee			

Table 1: Variables and Cronbach Alpha	coefficients
---------------------------------------	--------------

		Ghwamin Shahroud Bank customer club is a	(2006)		
		smart idea.			
		The idea of using the services available at the Ghavamin Bank Customer Club is an enjoyable idea.	Sheikh Sha'ee (2006)		
		The idea of using the services available at the Ghavamin Bank customer club is a lovely idea.	Sajedah (2011)		
Customer behavior		I would like to pay more than other banks, but I will be using it again.	Naseer Zadeh (2011)		
		I would like to recommend this bank to others	Naseer Zadeh (2011)		
	0.87	Advertisements by other banks do not diminish my interest in using this bank.	Naseer Zadeh (2011)	9-14	
		I transfer positive information from the bank to others.	Nibiu and Ado (2014)		
		If anyone is looking for a bank, I will offer him the bank.	Seagleh (2011)		
		In the coming years, my choice will always be this bank.	Naseer Zadeh (2011)		

Research hypotheses

The main hypothesis

The game strategy affects the behavior of the customers of the selected branches of the Mellat Bank in Shahrood.

First sub-hypothesis: Efficiency affects customer behavior.

Second sub-hypothesis: Attitude influences customer behavior.

Research findings

In this part, the software that is used to analyze the effect of the performance and attitude of a Gamification strategy on customer wasSPSS20.

Given the regression coefficients, the critical value and the P value, the research hypotheses have been tested, the results of which are presented in Table 2.

Hypothesis number	Hypothesis			The regression coefficient	Critical amount	Р	Result
1	Gamification	+	Customer Behavior	0.68	9.45	0.00	confirmed
1-1	Efficiency	+	Customer Behavior	0.61	8.01	0.00	Confirmed
1-2	Approach	-	Customer Behavior	0.64	8.28	0.00	confirmed

 Table 2: The result of testing hypothesis

Conclusion and Recommendations

According to the results of the research, all hypotheses were confirmed. Results of the first sub-hypothesis with the results of Sharma and Lijuan (2015) and Joe the Work (2013). Results of the second sub-hypothesis with the results of Bettner and Shiper (2014) and Tajzadeh Namin and

Etemadi (2011). Based on table 2, The following results can be deduced:

The findings of this study showed the importance of influencing the performance dimensions and attitude of the playing a game on the behavior of customers. Therefore, according to the confirmation of the first subhypothesis that efficiency affects the behavior of customers of selected branches of Mellat Bank in Shahroud city and

in this regard, bankers and planners need to consider performance as an important factor in improving the behavior of users, and the benefits of using the website, such as saving time in advertising and introducing their work schedules. Also, the use of game elements to teach financial and investment issues are actions that can increase the efficiency of customers. Financial education is especially important for teens and young people; because, in addition to asking them to know ways to secure their future, this can lead to the attraction of their funds in the bank and the improvement of the behavior of a large group of them in the long run. Based on the confirmation of the second sub-hypothesis that the attitude toward the behavior of clients of the selected branches of the Mellat Bank in Shahroud city has an impact, in order to improve the behavior of customers, it should strengthen the attitude of users towards these services.

One of the factors affecting the attitude of people is coercion; so, it can be concluded that the use of the game should be optional, because customers have different reactions to a game, and not all people are spoiled. Undoubtedly, researchers are confronted with limitations in their research, which may affect research results. Understanding these constraints will allow for better interpretation of the results of the research as well as the improvement of the quality level of subsequent research. The present study has been confronted with limitations. The first limitation is the concentration of this study in the city of Shahrud that the generalizability of the results with regard to the culture and social conditions of this city faces a constraint, While the Mellat customers range throughout Iran. Another limitation of this research is the use of a questionnaire tool for collecting data only. It is desirable to look for deeper insights and better understanding of their variables and relationships use different interviewing techniques such as focal or focused interviews.

Given these constraints, the generalization of research results is limited. Therefore, it is suggested that researchers in this field investigate the following: It is suggested that the subject of this research also be used in other service organizations that use play-based processes. It is also suggested that this research is conducted on several websites of an industry and analyzed in a separate industry. Because in this research the effect of two aspects of the performance and attitude of the game on customer behavior is investigated and given that there are other important factors in this regard, we can also examine their effects on customer behavior.

References

- 1. Bittner, J. and Shipper, J. (2014). "Motivational effects and age differences of gamification in product advertising". Journal of Consumer Marketing, Vol. 31, No. 5, PP. 391-400.
- 2. Conjeo, F. (2014). "Loyalty 3.0: How to revolutionize customer and employee engagement with big data and gamification". Journal of Consumer Marketing. Vol. 31, No. 1, PP. 86-87.
- 3. Deterding, S.(2011). "Situated motivational affordances of game elements: A conceptual model. Gamification: Using Game Design Elements in Non-Gaming Contexts", a workshop at CHI.
- 4. McGonigal, J. (2011)." Reality is Broken: Why Games Make Us Better and How They Can Change the World". Penguin Books.
- 5. Niiboi, S. and Addo, H. (2014). "Using the UTAUT model to analyze students' ICT adoption", International Journal of Education and Development using Information and Communication Technology (IJEDICT), Vol. 10, No. 3, PP. 75-86.
- 6. Singh, S.P. (2013). "Gamification: a strategic tool for organizational effectiveness". Anveshak, International Journal of Management.
- 7. Werbach, K. and Hunter, D. (2012), "For the win: How game thinking can revolutionize your business", Wharton Digital Press. Philadelphia, PA.

Spec. j. psychol. manag, 2018, Vol, 4 (3): 10-15

8. Zichermann, G. and Cunningham, C. (2011), "Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps", O'Reilly Media, Sebastopol, CA.PP: 208.