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How Effective Gamified Technics will lead to Customer Engagement?

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Abstract

Gamification approach recently has sparked interest among researchers as a new trend of increasing customer engagement (CE) in business-to-consumer (B₂C) contexts. However, there is a dearth of exploratory research specifically in Iran Market. This study aims to provide deeper insights into process of customer engagement by analysis of key factors in effectiveness of gamification. To achieve this aim, two main research phases were planned:1) detailed literature review on current studies in this scope and 2) Exploratory semi-structured interview with experts of gamification in small and medium enterprise (SMEs) in information technology (IT) industry in Iran. The synthesis of findings identified there are many game mechanics uses in designing games, which three key factors of feedback, gift and challenge have found to be more effective studies. The finding confirms the effectiveness of gamified mechanism in process of CE, in our sample based on gamified engagement mechanism. Implication of this study may help practitioners in developing more effective gamified CE strategies.

Key words: gamification, customer engagement (CE), small and medium sized enterprise (SME), information technology (IT)

Introduction

Today's ultra-competitive global market is experiencing a rapid proliferation in online or virtual engagement strategies. Gamification has supremacy among these strategies due to the elements of competition which is challenging and motivating for encouraging behavioral and emotional responses of customers (Harwood & Garry, 2015). Figuring out what engaging the user, applicable feedback in between, and to finally achieve what is a win for the user as well as the organization association, increases the level of co engagement (Singh, 2012).

Gamification has been applied in several areas which range from finance productivity, health, sustainability, news, user-generated content and e-learning (Xu, 2011). Gartner predicts gamification will be a key trend that every CIO, IT planner and enterprise architect must be aware of as it relates to business (Gartner, 2011). In IT industry research, BI intelligence forecast the market share of gamification would increase in 2018 to 5,502 million dollars. Following, in, BI intelligence report, gamification represents the fusion of four trends: "the explosion of social media usage, the mobile revolution, the rise of big data, and the emergence of wearable computing" (BI intelligence, 2013).

Gamification drives participation and engagement by integrating game mechanics and game dynamics into a various context specifically in IT industry such as website, service, online community, content portal, marketing campaign or even internal business workflows. Gamification influences behavior through the use of key concepts from a number of related areas, including game design elements (e.g., game mechanics), customer loyalty programs and customer management in community and cultural and economic situation in community. By consideration of all these facts, this study focused on the effect of game mechanics in process of customer engagement to provide a multilateral contribution for game designers in related area to use the more effective mechanics in gamification strategy.

Despite extensive explanation of gamification merits and shortcomings are provided in the literature, little case study work has sought to confirm gamification as a meaningful concept and provide evidence of its effectiveness as a tool for engaging users in IT contexts. Specifically, in developing countries (e.g., Iran) which the acceptance of gamification and inability to implement a suitable learning environment is of significant. To address this gap, this study aims to provide deeper understanding into the effectiveness of gamification process within the context of

6

CE. To this end, the contribution of this research is twofold. First, theoretical wise, it offers a conceptual review of the role of affective gamified technics in the process of CE in global market and specifically Iran SMEs in IT industry. Second, by exploratory semi-structured interview with experts of gamification in IT industry, this study is seeking the key factors in gamified engagement mechanics in Iran's IT industry.

The paper is structured as follows. First, we reviewed the literature of key effective mechanics of gamification from global scale and Iran market. Subsequently, we explain the multi-methods research methodology including the qualitative review study and interview adopted to address the research aims. Our discussion of the findings elaborates on three key factors of feedback, gift and challenge. Finally, conclusions are drawn and directions for future research are suggested.

Literature Review

In contemporary world, advancements in Web technologies have led to the emergence of a diverse form of online games. Online games can range from simple animation games to sophisticated Massively Multiplayer Online Games (MMOG) that users play, interact or compete against thousands of peers in the virtual world (Guo, & Barnes, 2007). One of the most recent forms of online games is called "Gamification" which includes games with a specific purpose (Von Ahn & Dabbish, 2008). Gamification is defined as the use of game elements to promote desired behaviors among customers in non-game contexts; particularly for consumer oriented web and mobile sites, in order to encourage users to adopt the applications. (Deterding, Dixon, Khaled, & Nacke, 2011). Gamification is also striving encourage users to engage in desired behaviors. In connection with the gamification application in IT context, measuring cybersecurity situational awareness, combat spam through community policing, productivity, customer engagement, brand awareness, loyalty and team building in mobile apps and websites are all examples. (Chua, & Banerjee, 2013, October; Fink, Manz, Popovsky, Endicott-Popovsky, 2013; 25 Examples of Gamification in Business, 2017).

Why effective gamification is a significant marketing strategy?

The most appreciate for game-based marketing is the power of games to affect consumer behavior through game mechanics. McGonigal, (2011) resonated the volunteering attribute of game play by considering games as the only force in the known universe that can get people to take actions without using force when it has contradiction with their self-interest. Game mechanics and psychological conditions of customers exploit are powerful tools that marketers can use instead of cash, which is cheaper in the long- run (Xu, 2011). The effectiveness of gamification in marketing led this strategy significant in global market.

An effective gamification strategy would help marketing planners to approach repeat visits of customers by creating awareness of a product/service in organization. In addition, by appropriate feedback from market, companies could enhance the efficacy of marketing research or simply making sales. All process of product/service design, research and innovation can take the advantage of effective gamification immensely. One of the examples of gamification application refers to education organizations. The MIT University investigated on why games are success in education and found that, "Game players regularly exhibit persistence, risk-taking, attention to detail, and problem-solving, all behavior that ideally would be regularly demonstrated in school". (Singh, 2012).

Here we provided the significance of effective gamification from CEO point of views. Joel Brodie, CEO and Founder of Gamezebo.com believed that, "....Game-Based Marketing is the first look at combining the power of games with the power of marketing to create an exciting new user paradigm: Fun ware. This is clearly the future."

Jonathan Epstein, CEO, In-Game Ad Firm Double Fusion, and Founding CEO, Gamespot.com. believed that "....The rise of multibillion-dollar gaming industry demonstrate the appeal that compelling, interactive content has over other more passive form of marketing.... in the field of gaming and the application of gaming techniques ...If you haven't applied games to marketing, advertising, or brand management, it could be game over for you".

Although the significance of gamification in both academic and practice have been mentioned in literature and adverting market, not all the gamification strategies are effective in verities of contexts. In other word, there might be possible dangers if the gamification design does not suit the purpose of motivating. In order to assess the effectiveness of gamification process, we need to determine what type of game mechanics should incorporate in specific context (e.g., activities) to meet the psychological and social needs of human motivation (Aparicio, Vela, Sánchez, & Montes,2012).

How game mechanics motivates engagement behaviors?

The game mechanics as elements of game design, involves rewards offer at different levels, challenges, points assignments, leaderboards, virtual space & goods, virtual gifts etc. These game elements are used to enhance the effectiveness of gamification. Therefore, game mechanics need to be systematically assessed, with the various elements both separately and in comparison, to another. According to Zichermann, & Cunningham (2011), by deploying some of the basic tenets of game design and discipline, specifically by using game mechanics like points, badges, levels, challenges, and rewards, focusing on making things more fun and rewarding, you can raise various engagement metrics.

Selection of game mechanics that match the objectives and support the needs of human motivation are the most impotent factors in evaluating effective gamification. Therefore, there are considerable number of studies made efforts to assess and evaluate the effectiveness of gamification through game mechanics in different contexts. Due to this fact, there are numerous approaches in the literature explored the game mechanics items and assigned them in to specified categories. As an instance, gamification mechanics are categorized in autonomy, competence and relation (Aparicio et.al, 2012).

Gamification in Iran Market

The application of game mechanics and gamification marketing strategy has been reported in few researches in Iran as a case study, such as increasing energy

9

efficiency via consumers' engagement (Yousefi, 2017) and teach recycling to 7-12 years old children in Iran (Mamaghani, Mostowfi, & Khorram, 2016). However, Iran as emerging economy market needs to grow and improve sectors such as information and communications technology (ICT) and financial services to be able to add \$1 trillion to GDP and create nine million jobs by 2035 (McKinsey & Company 2016). Furthermore, McKinsey global institute reported that, Iran will need to improve productivity and upgrade its industrial infrastructure to new technology, and modern management practices to be able to connect well to international systems that encourages more dynamic competition and innovation. Based on the research and interview with experts, we found five leading companies which had significant leading role in application of game elements in their marketing strategies.

Methodology

This paper adopted the multi-methods research methodology to review and discover the significance of effective gamification mechanics in customer engagement in both the literature and Iran IT market. To this end, first, we reviewed the literature of key factors of effective gamification strategy from global scale and second, we interviewed with the marketing consultants and experts, and game designers of five leading SMEs in IT industry. Table 1 provides information in regard of enterprises, the domain of their activity, their target customers, and the aim of application of gamification strategy.

Company	Activity domain	Target customer	Aim of application of
name			gamification strategies
Hamahang	Official representative of	The Consumers of digital	Introduce Hamahang
Group	sale, distribution, and after	products and services, The	guarantee, customers'
	sale's services of Samsung	intermediate sellers of	attraction, and improve
	mobile and tablet in Iran	companies' products and	sale performance.
		services with guarantee.	

Table 1. Name and information of selected SMEs in IT industry

Vistortech	Online store and news website of products and accessories related to information technology (IT) and the mobile phone market	Potential customers of digital products.	Brand positioning, customers' attraction
Avajang ICT Group	Sale, distribution and after sale's services of Gigabyte software and hardware IT products	All customer of digital products and services	Improve the number of sales through customer engagement
Zima news	Online website of IT news and nature	Young generation in Iran	To increase number of site views and increase number of commercial advertisements
Rayane khabar	Monthly news journal in IT area	Iranian 15-17 years old	Increase the gravitation of journal and improve the number of sales

Findings and Discussion

The findings of literature review reveal that, game mechanics fall into many more or less well-defined categories such as points, virtual economy, levels, leader board, badges, challenges, on boarding and engagement loop (e.g., feedback), loss avoidance, races, territory control and combination condition. While they all need to be balanced and clarified in both aspect of mechanics as objectives and skills. The result of semi-structured interview with experts of gamification in SMEs in IT industry indicated that, effective gamification strategy through feedback, gift and challenge as game mechanics would have the most influence on process of customer engagement in Iran SMEs in IT industry. One of the concerns of expert in regard of target marketing for SMEs was the demographic challenge to engage younger generation. This is in line with the general challenge that SME businesses faced with in all around the world. For example, millennials and Z generation, are valuable segment for small businesses to develop their market in Iran, while their

envision of loyalty packages are based on interaction and engagement rather than mere transaction. Therefore, challenge and feedback mechanics need to be practiced in well- defined social media platforms. Gamification strategies are difficult to manage specifically for SMEs in developing countries as their financial sources are limited. Accordingly, small businesses who want to use gamification to enhance customer engagement need to use prebuilt customer loyalty toolkits that integrate gamified design elements. Synthesize of the results discovered that businesses could motivate their customers to take desirable actions by rewarding them with badges and other incentives for frequent visits to their website, subscription, and purchasing items. Developing and designing gamified mobile app and social media accounts are the best platforms for challenging customers and involving them in game elements. In other words, gamification is a wide concept that give SMEs a competitive edge among their customers in emerging markets like Iran market. Building up gamification mechanics such as social promotional offers into customer engagement loop is an informative way to foster loyal customers. The results also confirms that gamification strategies need to be applied across different industries such as education, sales, health care, and customer service to see which elements are more effective for specific target market in practice.

Conclusion

This study tries to find how effective gamified system can result in customer engagement in Iran SMEs in IT market though game mechanics. However, the type of partnership, the type of participants and the sub-culture of community could make the function complex and cause heterogeneity among customer in terms of engagement in gamified system. With the progression of information and communication technology (ICT), electronic governance projects and crowdsourcing are the key components that have attracted governmental institution to benchmark the gamification design from SMEs and benefit from customer engagement and involvement in gamified mechanics. According to the findings, by carefully reviewing the literature, this study found several game

mechanics, while the application of gamification strategy in our sample is not as much pervasive as we found in literature. This finding can be justified due to emerging marketing situation of Iran as well as financial limitation of marketing budget of SMEs in IT industries in Iran. Accordingly, in developing countries there are questions of how to design applications that cater to the requirements of customers/consumers in the market. In addition, the synthetize of our interview results indicate that, the differentiation of customer reactions to the game mechanics in gamified system makes the process of customer engagement more complex. As far as discrepancy in social and economic class between upper-middle and lower-middle in Iran is growing, added value to users are not homogeneous even for specific business. Therefore, market segmentation would be an instructive solution to prioritize game mechanics for each segment. For example, most of the expert were believed that gift and challenge are the most effective element for engagement of their specific segment in online store. In conclusion, it is recommended that Iranian marketing associations conduct more research to come up with exclusive design for brands and their target audience. Precisely, by simulating the game mechanics categories in real-life contexts businesses can increase the motivation and engagement of customers by adding tangible value to their experience and make them interested in playing. On the other hand, government and related organizations need to take action to invest in gamification marketing strategies (e.g., Augmented Reality (AR) and Virtual Reality (VR)) as rapid growth of technology and modernization in recent years, end up with customercentric role for gamification and interest in using gamification for customer contributes to their collaboration, change management, and wellness.

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