GAMIFICATION: CHALLENGES IN ENSURING THE SATISFACTION OF NEW CONSUMERS

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Abstract
Society is increasingly reliant on technology in most areas, from commerce to education. Numerous IT applications appear and most of them try to address the needs and traits of different generations. In this context, both private and public organizations, are searching for innovative ways to attract and engage their clients. Gamification is one important solution. Studies show that using gamification in areas such as health, commerce, tourism or learning plays a crucial role in motivating, engaging and changing psychological behavior of users. For a consumer, gamification can make an activity, like learning, more appealing and rewarding, for an organization, it can enhance performance, while for society, it can increase the quality of life.
This paper aims to contribute to the research in the field of gamification and to highlight current traits of consumers' behavior in e-commerce.
A quantitative research was performed through a statistical survey which shows that age has an important influence on the approach towards technology, on the frequency and the purpose of using the Internet. Compared to older generations, Generation Y prefers using mobile devices and socializing is an important activity, while older generations prefer searching for different information. A great challenge for e-commerce providers is ensuring the satisfaction of new consumers that are generally more computer educated and less brand loyal. Gamification is the trending option, through its social and entertainment components, as well as through motivating and retaining consumers.

Keywords:
consumer behavior, gamification, Generation Y, e-commerce.

JEL Classification:
O30, M10.

Introduction
The development of innovative technology has generally attracted researchers' attention, especially in the retail context. Gamification is a new tool, that has been implemented in social behavioral science as well as in software development with the purpose to motivate, and influence subjects' actions. In this context a need to further study the characteristics of the modern consumer has emerged. Generation Y's approach towards innovative technology is different than in the case of previous generations. Their needs and desires are to be involved in decisions and processes that include them, be it a social context, political, or

economical one, which has led organizations to develop new ways to adapt and one popular tool in this case is gamification.

The main purpose of this study is to follow the trends in e-commerce and identify Generation Y's approach towards new technologies and to offer some solutions to improve consumers' satisfaction, by using gamification as a tool.

1. Consumer satisfaction - adapting to Generation Y

Generational cohorts are groupings of people determined by similar traits generated by common experiences. Sociologists have started analyzing these groups after the second World War (Whitehouse, Flippin, 2017).

The modern consumer group is mostly formed of Generation Y or Millennials, people born in the 20th century. One of their main traits is a positive approach to technology, especially mobile phones. Their reliance on these devices is so strong that some studies have pointed out a negative impact similar to drug use, like chronic stress or depression when the device is not in reach (Augner, Hacker, 2012). Some users present physical symptoms linked to anxiety and high stress and researchers named the behavior: No Mobile Phone Phobia (Musa, Saidon, Rahman, 2017). The process of researching, or making purchases through mobile devices has been name m-commerce and is part of e-commerce (Balasubramanian, Peterson, Jarvenpaa, 2002). Today's society has significantly changed compared to just a few decades ago and this can also be seen in the relationship between customers and suppliers. Markets nowadays are characterized by an oversupply of goods, most of them of high quality, current generations are much more informed and educated than previous and are more likely to make the proper choice when purchasing. Even if they don't, they can easily opt for complaining or changing their suppliers (Hill, Brierley, MacDougall, 2017). Furthermore, a satisfied customer can positively influence others, and most people rely on feedback from peers when deciding to make a purchase, as revealed also in the current study. A measure taken by some businesses to gather feedback from customers is running satisfaction surveys through their support teams. In the case of m-commerce, some studies show a positive and significant impact on the satisfaction perceived by subjects when using a mobile device to make purchases, generated by variables as: easy access to information or fast speed of completing the transaction (Agrebi, Jallais, 2015). The impact of the internet on the way consumers' behavior has been shaped is compared to that of the Industrial revolution. Studies show that there is a direct link between the quality of online services provided by a company, consumer satisfaction and loyalty (Nisar, Prabhakar, 2017).

2. Gamification – an innovative tool in ensuring the satisfaction of new consumers

Gamification is an innovative subject that gained increased popularity in technology and motivational and behavioral psychology in recent years. It can be defined as the use of gaming elements, such as avatar, achievements, hierarchy through levels, challenges, rewards, in non-gaming contexts (Werbach, 2015). Gamification can lead to increased motivation in subjects, better retention of clients and overall improved results for a company. It has already been used in fields such as: army training, healthcare, public services, and learning.

Some studies show that more than half of all organizations have implemented in some regard gamification in their processes or organizational software by 2015 (Benedikt et. al. 2018), thus the need for a better understanding of the topic is crucial.

Humans have enjoyed playing games since early history and, along with the development of informational technology, the characteristics of the games played have changed. Nonetheless, the motivations subjects have while performing this activity have remained the same and implementing them in a business environment is an innovative approach increasingly desired by companies. Thus, from an organizational point of view, using the

emotional mechanics of games, their utilitarian, hedonic and social value (Werbah, 2015) can bring benefits for all parts involved. The utilitarian aspect refers to the extrinsic rewards associated to the output of an activity, in gamification, the prize; this can be financial or in the form of recognition through achieving a leadership position. The hedonic mechanics is related to the enjoyment, the pleasure felt while performing this activity and it has an intrinsic value, and the social value comes from the collective aspect of the activity, as gamification activities are often based on social networks and online groups of users (Guang et.al., 2017).

From a modern's consumer point of view, gamification can cater to the needs of Generation Y, as one of their main characteristics is the need to feel involved in social, civic or organizational decisions or processes that involve them (Lissitsa, Kol, 2016).

3. Modern consumers' traits in e-commerce

3.1 Research objectives

Generation Y is the most connected to technology from all social cohorts so far. Their approach towards life in general and satisfying their needs, in particular, is shaped by this context. Ensuring the satisfaction of these modern customers is a challenge for organizations, thus a better understanding of their approach towards e-commerce and innovative technologies is crucial.

The main objectives of this study is to analyze the approach the new consumers have on innovative technology and identify their preferences when it comes to using the Internet, and in e-commerce.

The study is based on the following hypothesis:

I_{1a} *The age at which new generations have access to mobile technology is continuously decreasing.*

I_{1b} *New generations use the Internet with an increased frequency compared to older generations.*

I_{1c} *Mobility and accessibility are the main requirements when using the internet*

I_2 *While the new generations use the internet for socializing and e-commerce, older ones use it mainly for information.*

I_3 *The confidence of new generations is much higher in the use of online payment instruments; this has a significant impact on the evolution of electronic commerce.*

I_4 *Generation Y has a positive approach towards innovative technology such as artificial intelligence or advanced cyber security.*

3.2 Research methodology

Most new consumers that have currently reached maturity are significantly different from the previous generations, in response to the development of the Internet and information technology. The current research has focused mainly on this cohort, based on the assumption that their preferences and needs shape e-commerce and stimulate organizations to find innovative solutions, such as gamification, to ensure their satisfaction.

Thus, an exploratory quantitative survey of 116 e-consumers who belong to a generational cohort of the Y Generation served as the respondents for the data analysis. The invitations to reply to the questionnaire have been initially sent to a group of 600 subjects, during May to June 2017, out of which 19% responded, meaning 116 responses, which represented the core of this analysis. The survey ran through an online platform, and was based on a set of questions, ranging from general to specific.

The main questions of the research were: What is the age of first time users of mobile technology in Generation Y? How often does Generation Y use the Internet? What is the main device used to access the Internet by Millennials? What payment methods does

Generation Y prefer for online purchases? What determines the decision to buy online for Millennials?

3.3 Results and discussion

I_{1a} The age at which new generations have access to mobile technology is continuously decreasing.

The results' analysis shows that most Generation Y advocates have had their first mobile phone in their adolescence, all replies ranging in the 7 to 18 years' interval, as seen in table no.1, with the highest percentage (63% of replies) between 11 to 14 years. Taking into consideration the general development of society at that time and the availability of such technologies, one can conclude that Generation Y did have access to mobile devices at an earlier age, in their adolescence, than previous generations, thus the first hypothesis is confirmed.

Table no.1 Age at which Generation Y members received their first mobile phone

Age interval	Percentage
11-14 years	63%
15-18 years	26%
7-10 years	11%

Source: Own research

I_{1b} New generations use the Internet with an increased frequency compared to older generations.

Most Generation Y respondents (94.8%) use the Internet several times per day, as seen in table no.2, this frequency and the degree to which individuals rely on mobile devices raising, on edge cases, the concern of addiction. The sites most frequented by respondents are Facebook, YouTube and Google, hence the main activities are leisure, entertainment or socializing. This constant need for Internet access has not been encountered in any previous generation cohort, proving that the second hypothesis is validated.

Table no.2 Frequency of Internet usage for Generation Y

Frequency	Percentage
Several times per day	94.80%
Once per day	2.60%
3-5 times per week	0.90%
Less than 4 tims per month	1.70%
I never accessed the Internet	0.00%

Source: Own research

I_{1c} Mobility and accessibility are the main requirements when using the internet

As seen in table no.3, Generation Y needs to be connected to the Internet continuously, turning access to information technology into a basic need; they rely most on mobile devices, which give them flexibility and independence. The results, thus, confirm the third hypothesis.

Table no. 3 On what device Generation Y prefers to access the Internet

Device	Percentage
Phone	77.60%
PC	18%
Tablet	1.70%
Phone and laptop	0.90%
All of the above	1.80%

Source: own research

I₂ While the new generations use the internet for socializing and e-commerce, older ones use it mainly for information.

Most of the respondents, 61%, choose socializing, through email or social platforms, as their main activity on the Internet, followed by entertainment 23%, searching for information 9% and online shopping 3% (table no.4). As revealed in a previous research that included a survey ran on a random group including mixed generation cohorts, the main online activity for previous generations (36% of respondents) was searching for information (Vasilcovschi, 2015). In conclusion, this hypothesis is validated as well.

Table no.4 Online activities preferred by Generation Y

Activity	Percentage
Socializing	61.20%
Entertainment	23.30%
Searching for information	8.60%
Work	2.60%
Shopping	2.60%
Games	1.70%

Source: own research

I₃ The confidence of new generations is much higher in the use of online payment instruments; this has a significant impact on the evolution of electronic commerce.

Although new generations are much more connected to the Internet and new technologies, Generation Y respondents preferred paying on delivery for online purchases, as seen in table no.5, with 35% of those that prefer paying on delivery, replying that they have never used a credit card for online transactions. This can indicate a lack of trust in online security measures or a lack of information about the solutions one can use to ensure a safe and secure online environment for his transactions. Thus, the third hypothesis is invalid.

Table no.5 Payment methods preferred by Generation Y

Payment method	Percentage
On delivery	71.30%
Credit card	27%

Source: own research

I₄ Generation Y has a positive approach towards innovative technology such as artificial intelligence or advanced cyber security.

Current socio-economic changes are a measure of progress and development, still some aspects such as improvement in information and education should represent a drive for new generations of online consumers. The current study showed that Generation Y chooses a certain site for e-commerce mostly based on the criteria of 'quality customer support', if the

organization can provide fast and easy information and assistance about its products, with 49% of respondents choosing these criteria as very important. Aspects such as 'use of secure connection' and 'site speed' have been ranked less important. Furthermore, although quality support services are deemed important by respondents, most (44%) prefer using a classic approach to contact support, by phone, instead of online platforms. Most feel that an innovative approach to offering customer support, through artificial intelligence is not satisfactory enough, only 4% opting for such a solution (table no.6). Hence the final hypothesis is invalid.

Table no.6 Generation Y's approach to artificial intelligence in customer support

Type of customer support	*Percentage*
Traditional	44%
Both chat-bot and traditional	39.70%
I don't know what a chat-bot is	12.10%
Chat-bot	4%

Source: own research

Conclusions

Modern society has seen an unprecedented development in information technology, which allows easy and fast access to information, entertainment, socializing platforms and many more activities. Of all the previous generations, Millennials are the most trained and educated towards using these innovative technologies, they rely on mobile devices to fulfill a wide range of activities to an extent that can actually be dangerous for their health. In this context, organizations search for new ways to achieve competitive advantage and ensure the satisfaction of new consumers.

Generation Y feels the need to be involved in social, economic and political processes that concern them to a greater extent than previous ones.

New consumers see mobile technology as an integrated part of their lives and need to have easy access to internet anytime and anywhere. Most of Generation Y has had access to mobile devices since their early adolescence, thus using gamification as an organizational tool to promote e-commerce, to engage or to retain, or even on a social level, in health or e-learning, can be popular within this cohort. Growing up with games and further integrating theme in non-gaming contexts of their lives can contribute to motivate, guide and stimulate behaviors.

In contrast to previous generations, Millennials spend most of their online time socializing and on entertainment activities, such as watching movies, listening to music or online gaming, and less on targeted activities like searching for information. This aspect can prove positive for implementing gamification, as it turns a regular activity into a form of entertainment, thus engaging and retaining the user.

Although they are generally experienced in using technology, Generation Y takes an online purchasing decision mainly on traditional market criteria, on the human factor involved and the level of quality they could offer through customer support, rather than on on-line related aspects such as security or site functionality. Furthermore, respondents considered that a traditional customer support agent can offer better services than a chat-bot reliant on artificial intelligence.

Gamification can create an environment that ensures consumer satisfaction by catering to the needs of Generation Y, promoting an environment of socializing and entertainment, as well as bringing value to organizations through behavioral psychology and software innovations. Although their might be some hesitation towards edge technologies, such as

artificial intelligence, Generation Y's exposure to informational technology and needs of being actively involved in decision processes can soften the gap.

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