# CONSUMER PSYCHOLOGY TOWARDS GAMIFIED RETAIL SHOPS

# <sup>1</sup>Nivedda MK.

<sup>1</sup>Assistant Professor, Department of Corporate Secretaryship,Loyola College, Chennai nivedda@loyolacolle.edu

# <sup>2</sup>Dr. A. Jesu Kulandairaj

<sup>2</sup>Assistant Professor, Loyola college(Autonomous), University of Madras, Chennai, India

# <sup>3</sup>Dr.R.Angatarkanni

<sup>3</sup>Associate professor Department of commerce SRM Institute of science and technology

#### **ABSTRACT**

PURPOSE: The purpose of this study is to find out the impact of gamified retail units on consumer's psychology. The other purpose of this study is to analyze the factors that influence the consumers towards using gamification in retail outlets.

METHODOLOGY: The data for the study is collected from 45 retailers and 50 consumers throughout Chennai. Also, the study focuses only on the selected major retail outlets and their branches in the city. Purposive sampling method has been used.

TOOLS AND TECHNIQUES: Demographic profile of the respondents is studied. ANOVA and Factor Analysis are used for the study.

FINDINGS: The study identified that the usage of gamified tools in the retail outlets have increased during this decade and there are various factors that influence the use of gamified tools in the retail outlets because of the change in consumers' psychology.

IMPLICATIONS: The results of the study indicates that, this is the right time for the retailers to adapt with the technology and use such innovative tools into their business as most of the large retail outlets in the city are already being benefited because of such techniques.

KEYWORDS: Gamification, retailers, profit maximization and technology

# **INTRODUCTION:**

Retailing is constantly changing and is characterized by major changes related to the digitalization process. These changes have impacted multiple areas of the retail sector with the integration of stores and e-commerce through the implementation of omni-channel strategies and tools (Jocevski et al., 2019; Alexander & Blazquez Cano, 2020; Hübner et al., 2021). The pandemic has accelerated the digitalization process, with the introduction of new technologies (Pantano & Vannucci, 2019) affecting both consumer behaviors and retail business strategies and tools (Cakir et al., 2021; Fortuna et al.; 2021). In particular, digital innovation is used as a lever to social and emotional elements in the store itself (Hagberg et al., 2016; shi et al., 2020). In this connection, digital game development is always growing as retail marketing tools (üsturfaş, 2020). The

phenomenon of retail digital innovation through digital gaming tools is still explained and deserves special attention.

The word "gamification" was influenced by Nick Pelling, Computer Programmer, and Game Developer in the year 2002 (Pell, 2011). The concept of "gagage" was famous in February 2010 between Las Vegas 'd.c.e. Summit'. According to some scholars, gamification is "the use of game design elements in non-gaming contexts" (Deterding et al., 2011). This definition of gamification was developed in 2011 and is still used internationally. Another definition gamification is "the process of using game thinking and game dynamics to attract viewers and solve problems." (Zichermann and Cunningham, 2011). Gamification acts on the human psyche. Within a game design it is necessary to use different mechanics (Petruzzi,

2017; Maestri et al, 2018). the most famous are:

- Points/credits: They are the immediate reward for the player's actions.
- Levels: They are a system to insert progressive goals, in order to influence the player's motivation.
- Badges / Achievements: The badges set off the achievement of a goal, increase the sense of the challenge and typify the player's profile.
- Rank: A way to organize user performance. The comparison among people generates a sense of competition, foster interest and increase the time spent in the game.
- Challenges: They are obstacles which the player must overcome to earn points, badges and level up.
- Virtual assets: They are goods that have value for the player within the virtual world of the game but also in the real world.

Gamification is using mechanics of game design in non-game contexts to achieve a specific goal (e.g. motivate and involve). Serious games are 100% games. For example, Apple uses the "progress bars" and challenges between friends inside the Apple Watch to measure physical activity. In this case we are talking about gamification because the movement section of the Apple Watch is not a game. A "serious" game is a whole and complete game. For example, "Wii Fit" (a videogame of Nintendo) is aimed at exercising at home. The term "serious" has been used to indicate serious contexts, other than mere entertainment. They can be used in many different fields like health, marketing, social and non-profit issues, education and school, corporate and human resources.

# **REVIEW OF LITERATURE:**

In the academic literature, gamification is setting out to gain momentum and completely different analysis on various streams using different definitions in reference to the purpose of study that researchers examine and its effects. Focusing on the overall goal of gamification from the marketing perspective, Huotari & Hamari (2012) outline, gamification as "a method of enhancing a customer

experience with affordances for gameful experiences so as to support a user's overall price creation". Another definition comes from Deterding et al. (2011) who determines gamification as "the use of design elements characteristic for games in a non-game context".

A different idea of gamification, conferred by Zichermann and Cunningham (2011) endorses gamification as a "process of game-thinking and game mechanics to engage users and solve problems". All the above mentioned definitions have advantage within the area that they address gamification.

Various business sectors have known the potential for increment in shopper interactions and jumped on the gamification wagon for the ride. Retailers in Asian countries have known it as associate approaching trend of social media selling and their client central initiatives embody gamification in their core method so as to "drive engagement and participation" (Archana, 2012).

In Education, gamification has been found to possess nice potential to inspire students (Lee & Hammer, 2011; Simõesa, Diaz Redondob, & Fernández Vilasb, 2012).

In the sustainability sector especially, analysis conducted by Kuntz et al. (2012) resulted within the introduction of gamification within the sustainable awareness and efforts of people had positive outcome in saving energy, water and reducing hydrocarbon use like the same sectors that have benefited from the introduction of gamification. The present study tends to look at the potential benefits of using gamification in the retail sector in Chennai region.

#### **OBJECTIVES**

The current study is carried out:

- 1. To analyze the demographic profile of the consumers
- 2. To identify the usage of gamificatin techniques in the retail sector
- 3. To determine the factors that influence the use of gamified tools in the retail outlets because of the change in consumers' psychology

Nivedda MK,et. al. 7468

#### METHODOLOGY

The study has been undertaken for the past six months in Chennai city. The data collected from primary and secondary sources are used for the study. The study adopted a purposive sampling method to select sample from the total population to conduct the research.

Primary data have been collected from the questionnaires distributed among the retailers and consumers throughout the Chennai city. The questionnaire designed for this study had two sections that include a normal scale for demographic information of respondents and 5-point Likert Scale questions. The questionnaires were distributed to 45 retailers

and 50 consumers which were used for the analysis. Secondary data have been collected from books, journals, internet, etc.

Data gathered from the questionnaires were interpreted with "Statistical Package for Social Science" (SPSS) version 20.0. Frequency analysis has been used to analyze the demographic profile of the respondents. ANOVA and Factor analysis tools have been used to identify the factors that influence the retailers to use gamification into their business and their relationship with consumer psychology.

#### ANALYSIS AND INTERPRETATION

Table No. 4.1 Demographic profile of the consumers

Factors		Frequency	Percentage	
Candan	Male	28	47.5	
Gender	Female	22	52.5	
	18 - 28	26	52.5	
	29 - 38	15	30.0	
Age	39 – 48	6	12.5	
	48 and above	3	5.0	
Marital status	Single	22	52.5	
	Married	28	47.5	
	Diploma	2	3.8	
Educational qualification	Undergraduate	29	57.5	
	Postgraduate	17	35.0	
	Others	2	3.8	
	Less than Rs. 20,000	13	26.3	
Monthly income	Rs. 20,000 – Rs. 40,000	24	47.5	
Monthly income	Rs. 40,000 – Rs. 60,000	9	17.5	
	More than Rs. 60,000	4	8.8	

# Inference for the above table

The above table depicts the demographic factors and their distribution towards the study. Out of 50 respondents, 52.5% of respondents found to be women. As the awareness and usage of gamfied tools grabs the attention of

youngsters, this study also has the maximum number of respondents from the age group of 18-28. Also, most the consumers are undergraduates and their monthly income ranges from Rs. 20,000 to Rs. 40,000 per month.

Table No. 4.2 KMO AND Bartlett's Test for Work Performance

KMO AND Bartlett's Test					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy .734					
	Approx. Chi-Square	1654.773			
Barlett's Test of Sphericity	Df	378			
	Sig.	.000			

Inference for the above table

Before computing factor analysis for the study, it has been identified that KMO sampling acceptability is highly satisfied with the scale of

measures. Based on KMO measure, values should be more than 0.60 to 0.70 while computing the result. As mentioned above, the Barlett's test of Sphericity resulted with main aspects with approximate Chi-square value as 1654.773 as it is also considered as an constructive output. Degree of freedom implies

the 378 as the freedom value and the final level of significance is 0.000 as it is less than 0.05 under the probability value. Hence, the study resulted in a valid output with greater significant value in order to deliver the concept in effective manner.

**Table No. 4.3 Rotated Component Matrix** 

	Rotated Component Matrix  COMPONENTS						
	1	2	3	4	5	6	7
F26	.796						
F28	.717						
F25	.671						
F6	.612						
F9	.552						
F24	.501						
F8	.466						
F16		.832					
F18		.763					
F20		.711					
F4		.576					
F17		.567					
F19		.554					
F2		.526					
F5			.835				
F23			.606				
F20				.631			
F14				.589			
F15				.584			
F21				.580			
F7					.792		
F13					.766		
F3					.576		
F11						.805	
F12						.658	
F1						.438	
F10							.714
F22							.672

**Extraction Methods: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization** 

#### Inference for the above table

Above tables explains the principal component analysis and rotated factor loading method is used to identify the factors. It has been observed that out of 28 variables, 7 factors were identified by the rotation method.

# **Grouping factor**

1. The factor "**Rewards encourage loyalty**" explains the 1<sup>st</sup> component.

- 2. The factor "**Brand awareness**" explains the 2<sup>nd</sup> component.
- 3. The factor "Customer engagement" explains the 3<sup>rd</sup> component.
- 4. The factor "Customer retention" explains the 4<sup>th</sup> component.
- 5. The factor "**Positivity**" explains the  $5^{th}$  component.
- 6. The factor "**Target attainment**" explains the 6<sup>th</sup> component.

Nivedda MK,et. al. 7470

7. The factor "Customer satisfaction" explains the 7<sup>th</sup> component.

From the above table, it is very clear that 3<sup>rd</sup> factor i.e., customer engagement in the retail outlet has been recorded with highest factor loading of 0.835.

H0: There is no significant difference between age and customer enagement towards gamified shopping

H1: There is a significant difference between age and customer enagement towards gamified shopping

# **HYPOTHESIS**

Table No. 4.4 ANOVA for age group of consumers and their engagement into gamified shopping

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.689	1	5.982	2.865	.035
Within Groups	98.343	88	2.563		
Total	104.281	89			

#### **Inference**

The above ANOVA table shows that the significant value is 0.035 and it is lower than 0.05 so reject the null hypothesis. Hence there is a significance difference between the age and their engagement towards gamified shopping experience.

#### **HYPOTHESIS**

H0: There is no significant difference between gender and customer enagement towards gamified shopping

H1: There is a significant difference between gender and customer enagement towards gamified shopping

Table No. 4.5 Table 2 - ANOVA for age of consumers and their engagement into gamified shopping

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.327	1	.321	1.421	.241
Within Groups	10.603	88	.237		
Total	11.210	89			

# **Inference**

The above ANOVA table shows that the significant value is 0.241 and it is higher than 0.05 so accept the null hypothesis. Hence there is no significance difference between the gender and their engagement into gamified shopping experience.

# FINDINGS, SUGGESTIONS AND CONCLUSION:

From the above study, it is very clear that gamification has a direct influence over consumers' psychology which ultimately influences consumer engagement and many other aforesaid factors. Although many retailers both online and offline have started using some or the other kind of gamification technique into their business to provide a better customer experience, many small retailers are quite unaware about the tools, techniques and impact of gamification into their business. Hence, it is

the right time for the retailers to switch from old traditional way of selling to use modern, innovative and cost effective ways of selling.

#### **References:**

Archana, B.: A Case Study on Retailing in India. EXCEL International Journal of Multidisciplinary Management Studies 2(7), 178–188 (2012)

Deterding, S., Dixon, D., Khaled, R., Nacke, L.: From Games Design Elements to Gamefulness: Defining "Gamification". In: Proceedings of The 15th International Academic Mindtrek Conference, Tampere, Finland (2011)

Hagberg, J., Sundstrom, M., & Egels-Zandén, N. (2016). The digitalization of retailing: an exploratory framework. International Journal of Retail & Distribution Management, 44(7),

694-712, hiips://doi.org/10.1108/IJRDM-09-2015-0140.

Huotari, K., Hamari, J.: Defining Gamification - A Marketing Perspective. In: Proceedings of the 16th International Academic MindTrek Conference. Tampere, Finland (2012)

Jocevski, M., Arvidsson, N., Miragliotta, G., Ghezzi, A. and Mangiaracina, R. (2019). Transitions towards omni-channel retailing strategies: a business model perspective. International Journal of Retail & Distribution Management, 47(2), 78-93.

Kuntz, K., Shukla, R., Bensch, I.: How Many Points for That? A Game-Based Approach to Environmental Sustainability. In: ACEEE Summer Study on Energy Efficiency in Buildings, Pacific Grove, CA, pp. 126–137 (2012)

Lee, J., Hammer, J.: Gamification in education: What, how, why bother? Academic Exchange Quarterly 15(2) (2011)

Pantano, E., & Vannucci, V. (2019). Who is innovating? An exploratory research of digital technologies diffusion in retail industry, Journal of Retailing and Consumer Services, 49, 297-304.

Pelling, N., (2011). The (short) prehistory of "gamification" Funding Startups (& other impossibilities).

Zichermann, G., & Cunninghma C. (2011). Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps. Sebastopol, CA: O'Reilly Media, Inc.