

The Interplay of Rewards, User Interface, and User Experience in Engaging Indian Hyper-Casual Game Players: A Technology Acceptance Perspective

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How to cite this article: Rajat Bandopadhyay, Nima Jerri John, Mangesh Karandikar (2024). The Interplay of Rewards, User Interface, and User Experience in Engaging Indian Hyper-Casual Game Players: A Technology Acceptance Perspective, 44(3), 1083-1095.

ABSTRACT

In this study, an experimental method involving a quantification of perspectives has been considered. The approach here included exposing the respondents in the study to a hyper-causal game and then recording their perspective about its different features immediately using a structured questionnaire. The study has used the Indian market as the area of investigation. The game called car park 3.0 is a hyper casual game that involves a scenario using cars while gathering rewards along the game. A total of 492 respondents selected using judgement sampling in the Indian market were included for the study. The impact of the reward system on the user experience is the highest amongst all. The inclination of Indian hyper casual gamers towards reward system shows that it can help in generating a better scenario for user experiences. The study also establishes the importance of gaming interface elements mostly the visual appeal and sound effects. It is due to these elements of the interface that the overall user experience can be highly amplified.

Keywords: Hyper Casual; Games; User Interface; User experience; Technology; Rewards

1. INTRODUCTION

The word hyper-casual first debuted in 2017 in Johannes Heinze's series of articles titled The Ascendancy of Hyper-casual. In the same place, the author describes the primary trait of hyper-casual games: quick access to content. Without any plot inserts, preloading, level selection, or lengthy tutorials, the user is immediately transported to the game's epicentre (Burns, 2017). As the gameplay is simple and not overly detailed, a few seconds are all that is required to understand what is going on. A brief game cycle allows you to play anywhere, at any time.

Hyper-casual games have grown as a substantial section of the mobile gaming market, distinguished by simple principles, easy accessibility, and extremely engrossing gameplay. These games are often meant to be played in short spurts, making them appealing to a wide range of players, including individuals who may not consider themselves traditional gamers (Tan & Tan, 2022). Hyper-casual games' global rise has been spurred by advances in mobile technology, changes in consumer behaviour, and strategic developments within the gaming business. One of the primary reasons for the popularity of hyper-casual games is its accessibility. Unlike more complicated games, which require a large time investment and frequently a steep learning curve, hyper-casual games are intuitive and simple to master (Zelevskaya, 2022). This simplicity reduces the barrier to entrance, attracting a diverse player base. The accessibility of hyper-casual games has resulted in demographic diversification among players, with significant engagement from older adults and women, both of whom have previously been underrepresented in the gaming community (Paano, 2023).

The emergence of Indian players in the mobile gaming market has sparked widespread interest over the last

decade. With the rapid proliferation of low-cost smartphones and rising internet access, India has emerged as one of mobile gaming's fastest-growing marketplaces. This expansion is supported by a diversified demographic profile, which is influenced by a variety of socioeconomic circumstances, as evidenced by multiple statistics that highlight Indian gamers' broad reach and participation.

India's mobile gaming sector has expanded rapidly, becoming one of the world's largest. According to a recent research, India is the world's largest gaming market, with 568 million gamers and over 9.5 billion gaming app downloads expected by 2023. The analysis, headlined 'Robust Fundamentals to Power Continued Growth', discovered that India accounts for nearly 20% of total mobile game downloads worldwide, surpassing even the combined download totals of the following two countries: the United States and Brazil. The mobile-first phenomenon is driving the sector's quick growth at a CAGR of 14% (Gamecloud, 2024). Mobile accounts for 90% of the gaming market in India, compared to approximately 37% and 62% in the United States and China, respectively. The incorporation of vernacular languages and Indian themes into numerous apps and games is broadening the addressable user base to non-English speaking communities. Current internet growth in India is driven by new rural users (13% vs. 4% urban), who prefer vernacular content. Women account for over 40% of the gaming population in India, and they prefer casual and hyper casual gaming experiences. Until three years ago, women accounted for barely one in every five Indian players. Around 20% of Indian gamers pay for their games, with pay-to-play, casual, and core games being the most popular. In-app purchases are expected to expand at the fastest rate, at roughly 35% CAGR, with the rise of paying consumers concentrated in casual and core genres (Basuroy, 2024).

The main focus of the study is to understand the hyper casual games in terms of user interface (UI) and user experience (UX) while considering the Technology Acceptance model for reference in constructing its different aspects and interpreting them with respect to the Indian market.

The following research questions would be answered in this study –

RQ1: How does the type and design of in-game rewards act in player retention in a hyper-casual game targeted towards the Indian market?

RQ2: Does the user interface (UI) elements have an impact on player motivation and engagement within a hyper-casual game for Indian players?

RQ3: Can User experience (UX) contribute to player satisfaction with a hyper-casual game designed for the Indian audience?

The details on the above questions are provided in the upcoming sections of the study.

2. REVIEW OF LITERATURE

Game rewards in video games are incentives designed to motivate and engage players by providing a sense of achievement. These incentives could include points, in-game currency, equipment, power-ups, or unlockable content. The link between rewarding components of video games and problematic gaming activity can be associated highly. One example of this technique is the usage of "loot boxes" in video games; this type of reward is similar to gambling principles in that it is frequently unknown how likely specific commodities will be gotten within the game, and high-end things are difficult to win (Pirrone et al., 2023). Furthermore, many successful games include a recurring log-in incentive called contingencies rewards, which provide players a free reward of virtual goods each time they log in (Kristiansen & Severin, 2020). These incentives make use of operant conditioning, a well-known behavioural economics strategy that includes positive reinforcement of a certain activity, in this case increasing logins by tying them to a reward (Neely, 2021; Puiras et al., 2022). When claiming the reward, users associate the positive feedback with their log-in conduct and this nice feeling with the game. These games are played on the ubiquitous smartphone and have captured the attention of many different types of players. To improve game compliance, specific subgroups are often targeted with these games (Taylor et al., 2019). Studies claim increasing the amount and variety of rewards helps to improve the player experience (Johnson et al., 2018).

In hyper casual games, game rewards are crucial to keeping players interested and engaged. When you finish a level or get a good score, you are usually given coins, points, or cosmetics. With their instant pleasure, these prizes

encourage players to keep playing and improve the overall game experience by offering straightforward, fulfilling incentives. The intuitive nature of the design and in-game rewards boosts its appeal and adoption, particularly among people who are disadvantaged by the digital divide (Pizzo, 2023). Aside from the game's core concepts, it created many motivators and integrated them into the game, then assessed their usefulness, as well as other potential elements such as game flow or game quality, in affecting how long players spent in the game (Lyu, 2022). The auditory, visual, and gameplay design decisions and player expectations for RRM reward presentations, and discovered that the resources needed to get the reward and the prize's relative value influence its expected presentation (Yin and Xiao, 2022). According to Frommel and Mandryk (2022), many games use engagement benefits to entice players to engage, such as seasonal rewards like holiday skins. These rewards may assist players by boosting enjoyment or motivation; yet, sceptical players may see them differently, such as gloomy patterns that do not benefit players and may distract from—or even harm—player experiences. Because they are frequently used in a range of games, it is critical to understand how such rewards are perceived by players in order to identify potential hazards, such as when they are detrimental to the gaming experience or lead to unhealthy gaming behaviours. The researchers discovered that players interpreted these benefits as useful (e.g., motivation), unpleasant, or even an obligation or task. First, watching reward commercials can assist players in transitioning to a higher engagement level, albeit the degree of the positive effect decreases as players progress to higher engagement stages. Second, there is an inverted-U shape between the variation of perceived difficulty and the likelihood of shifting to or remaining at a greater level of engagement (Deng et al., 2021). Third, perceived difficulty is beneficial to players in low or high engagement stages, whereas a sense of accomplishment benefits players of all levels. Finally, players with a low engagement level are more likely to watch reward commercials than those with a medium engagement level, and players are more inclined to watch reward ads as games become more challenging.

This field requires more investigation especially in an increasing market demand for hyper casual games and this study would investigate the same.

3. RESEARCH METHODOLOGY

The study uses the research onion method to categorise the methodology section effectively. This model is based on the principles of thinking, philosophy, methods, approaches, procedures, decisions, time skylines, strategies, and techniques. These methods all together make the process of methodology better and enable an error free and unbiased result generation. The research employs a quantitative approach, which is well-suited to the study's objectives and the desired outcomes. This method is chosen to enable the quantification of results, facilitating efficient data analysis through various statistical tools.

The sampling population serves as an essential component of any study. The focus here is to investigate hyper-casual games and the user experiences that it provides. The study is interested in the Indian market specifically as not many studies have focused on this region although the number of mobile gamers are increasing. Hence, the considered population for this study would be the residents in the country of India who have an experience of playing online hyper-casual games. Based on the requirements of the study, a non-probabilistic approach is undertaken here. The sampling technique used here is judgment sampling.

This method allows one to select the required respondents from the population by establishing a condition that would help to fulfil the research. In this case, the inclusion criteria being established are as follows –

1. Must be an Indian citizen.
2. Should be above 18 years of age.
3. Must be involved in playing mobile games at the present time.
4. Must be aware about the basics of playing any hyper-casual mobile game

In order to confirm the optimum sample size, the study includes the conditions of (Krejcie & Morgan, 1970) minimum sample size requirement as well. As there is no reliable database suggesting the total number of mobile gamers in India, the minimum sample size considered using the approach is considered at 384. This is the minimum sample size to be included when the population of the study is more than a lakh and considered infinite. Considering all the above mentioned aspects, a total 500 respondents are considered as the initial size of

respondents.

The primary data collection process begins with approaching the respondent to play a hyper-casual mobile game. The name of the game is Car Park 3.0 and is an experimental hyper-casual game designed for academic purposes. The game is easy to install and play.

In the first stage, the respondent is asked to play the game for a duration of 15 to 20 minutes. This helps them to go through every important aspect of the game that are of interest to the researcher and the study.

Once the gaming experience is over, the respondent is required to fill up the questionnaire designed by including items from existing literature.

4. Data Analysis and Interpretation

This section includes discussing the statistical analysis for the collected 492 sets of data. The first demographic variable used for narrating the respondents is that of gender. There are almost equal numbers of male and female respondents considered. This shows that gaming is now equally consumed among individuals of both genders. There are 50.2% male in the set of respondents and 49.8% females. With nearly the same representation from both genders would help to understand the similarity and differences of opinion better.

For the intensity of these respondents when it comes to playing mobile games, their approximate indulgence is measured in terms of per hour involvement in gaming. The range and the frequencies in each of them shows that for the majority of the respondents with 40%, they engage in 1 to 3 hours of gaming every day. There are 29.9% who include 3 to 6 hours of gaming followed by 20.1% who spend less than 1 hour. Lastly, there are 10% of respondents who are involved in more than 6 hours of gaming per day. This shows that the category of respondents included here have majorly moderate levels of involvement in gaming. The least number of respondents show more than 6 hours of gaming time which is a relevantly good position.

The questionnaire designed to collect data from the respondents has been broadly divided into four categories.

These are based on the most critical factors that are required to be considered when understanding players' experience in hyper-casual games. The validation of the data set with the items is done by using principal component analysis (PCA) to estimate the extraction of the mentioned factors. This method helps to extract the underlying factors from a set of items using varimax rotation. This method helps to understand if the four factors initially considered for the study are actually represented by the datasets collected for the study. Fulfilling the requirements by (Hair et al., 2006), the acceptance level for any item under the factor would require a factor loading of more than 0.4.

The results from the PCA are as follows –

Table 4.1 - Component Loadings									
	Component								
	1	2	3	4	Uniqueness				
Did the rewards system in this game motivate you to continue playing?	0.732					0.4086			
The rewards in the game made me feel excited and eager to play.	0.733					0.1650			
I felt challenged to earn more rewards in the game.	0.667					0.1069			
Earning rewards in the game gave me a sense of progress.	0.769					0.0810			
The rewards in the game made me feel more skilled as a player.	0.933					0.0487			
I felt a sense of satisfaction when I received rewards in the game.	0.739					0.3224			

Table 4.1 - Component Loadings									
		Component							
		1	2	3	4	Uniqueness			
The rewards in the game made me feel like I was achieving something.		0.885						0.2045	
Earning rewards in the game made me want to share my achievements with others.		0.753						0.2395	
Rate your overall experience of this game's reward system		0.677						0.2404	
How easy was it for you to understand the controls and gameplay mechanics of this experimental game?			0.667					0.1069	
The game's controls were easy to learn and use.			0.769					0.0810	
I found the gameplay mechanics to be intuitive and enjoyable.			0.933					0.0487	
The controls enhanced my overall experience of playing the game.			0.739					0.3224	
Understanding the gameplay mechanics was crucial for my enjoyment of the game.			0.885					0.2045	
The control and gameplay mechanics of the game were a key factor in my decision to continue playing.			0.753					0.2395	
How did you find the visual appeal of this game's interface?						0.911		0.0383	
How appealing did you find the color scheme of the game?						0.688		0.1071	
Rate this game's overall color scheme in terms of its appeal						0.892		0.0764	
Rate this game in terms of visual appeal overall						0.927		0.0401	
The game interface was easy to navigate and understand.						0.924		0.0779	
I found the game interface visually appealing and engaging.						0.885		0.2045	
The game interface enhanced my overall experience of playing the game.						0.753		0.2395	
Understanding the game interface was crucial for my enjoyment of the game.						0.911		0.0383	
The game interface was a key factor in my decision to continue playing.						0.688		0.1071	
How did the music used in this game complement your overall gameplay?						0.892		0.0764	
Rate the quality of music used in this game in terms of their engagement and motivation to play						0.927		0.0401	

Table 4.1 - Component Loadings										
		Component								
		1		2		3		4		Uniqueness
Rate the quality of sound effects used in this game in terms of their engagement and motivation to play								0.924		0.0779
Did you feel a sense of accomplishment as you progressed ahead in this game?						0.924				0.0779
How challenging was the gameplay of this experimental game?						0.885				0.2045
Did you feel a sense of accomplishment as you progressed ahead						0.753				0.2395
Rate the User Experience of this game in terms of its ability to satisfy your gaming experience						0.911				0.0383
The rewards in the game added to my overall enjoyment of the gameplay.						0.688				0.1071
The music and sound effects in the game contributed positively to my experience.						0.892				0.0764
The colors and visuals in the game were appealing and enhanced my enjoyment.						0.927				0.0401
The game controls were responsive and easy to use.						0.924				0.0779
The gameplay mechanics were challenging and engaging.						0.911				0.0383
The game interface was user-friendly and intuitive.						0.688				0.1071
The overall gameplay experience was enjoyable and satisfying.						0.892				0.0764
I would recommend this game to others based on my experience.						0.927				0.0401
The game provided a good balance of difficulty and fun.						0.911				0.0383
Playing this game was a positive and rewarding experience.						0.688				0.1071
How enjoyable did you find this experimental hyper-casual game?						0.892				0.0764
Rate your overall experience of this experimental game in terms of its enjoyability						0.927				0.0401
How likely are you to recommend this game to others?						0.924				0.0779
Note. 'varimax' rotation was used										

With every item specifying a factor loading of more than 0.4, it is seen that the underlying items having eigen value of more than 1 are four. This refers to the actual set of factors that were considered in the questionnaire and adheres to the dataset considered.

The four factors are hereby described below –

Table 4.2 – List of Factors

Factor	Total Items in Questionnaire	Description
Reward Systems	10	This factor helps to identify different types of rewards that the gamer can earn during their experience. This factor interprets the users satisfaction with the rewards and the process of availing them in the game.
Control & Game Play Mechanics	6	This factor understands the ease at which the controls of the game could be managed by the respondents. The level of ease and enjoyment associated in the process has been investigated.
Game Interface	12	This enquires about the experience of the gamers with the interface of the game. It understands about the effectiveness of the interface to provide a good gaming experience through its visual appeal and complimenting to the actual game play.
Overall Gameplay experience & Enjoyability	15	This factor is used to specify the overall enjoyment derived by the gamer from this game. It includes different parameters to draw an overall score for the experience of gaming.

To understand the impact of rewards towards the retaining of players of hyper-casual games in the Indian market, a multiple linear regression is conducted where the factor of rewards system is considered as the independent variable and overall gameplay experience and enjoyability which can indicate the retention of players as the dependent variable. The results of the regression are as follows –

Table 4.3 - Model Fit Measures- Reward Systems

Table 4.3 - Model Fit Measures- Reward Systems											
						Overall Model Test					
Model	R	R ²	Adjusted R ²	F	df1	df2	p				
1	0.855	0.730	0.730	1327	1	490	< .001				

Table 4.4 - Model Coefficients - Overall Gameplay experience & Enjoyability

Predictor	Estimate	SE	t	p
Intercept	0.961	0.0640	15.0	< .001
Reward Systems	0.742	0.0204	36.4	< .001

The model generated shows a high level of variance in overall experience and enjoyability by reward systems. The model with a p-value of less than 0.05 shows a significant model generation. The adjusted R² stands at 0.730

which indicates 73% variance in overall experience and enjoyability and employability with one unit change in reward systems. The estimate at 0.742 shows that a positive impact is provided by the reward systems. The mean scores show a low level of agreement about the satisfaction with the current reward system of the game. But the regression model shows the high level of impact it causes on the experience that can lead to retention of players in the Indian market. Hence, for the considered game or others operating in the Indian market, the need to accelerate the reward system is quite important. This leads to the rejection of the first null hypothesis in the study.

The second attempt refers to understanding the impact of user interface on the motivation and engagement of the players. In order to do so, the factor of game interface is considered as the independent variable and the same independent variable is considered to conduct the second regression analysis. As the control and mechanics also form an important part of the game interface, it is also used as the second independent variable in the model.

Table 4.5 - Model Fit Measures - Control & Game Play Mechanics/ Game Interface															
								Overall Model Test							
Model		R		R ²		Adjusted R ²		F		df1		df2		p	
1		0.967		0.944		0.944		41084		2		489		< .001	

Table 4.6 - Model Coefficients - Overall Gameplay experience & Enjoyability						
Predictor		Estimate	SE	t	p	
Intercept		-0.0102	0.01151	-0.887	0.375	
Control & Game Play Mechanics		-0.0566	0.00658	-8.596	< .001	
Game Interface		1.0580	0.00735	144.018	< .001	

The second regression is also statistically significant and generates a very high adjusted R² value. With a variance of 0.944, the ability of the two independent variables to cause a change in overall gaming experience and enjoyability stands at 94.4%. The two variables impact significantly but the game interface has a positive impact and control and game play mechanics has a negative impact. This shows that game interfaces being designed better can lead to an extension of the experience and enjoyability levels of the respondents. But the control and game play mechanics although relatively lesser impact with an estimate of 0.0566 has a negative impact. The focus of the hyper-casual games in the Indian market should be to increase the efficiency of the game interface in terms of visual appeal, sound effects and music rather than focusing on improving controls and mechanics.

The third attempt is to understand the impact of User experience on player satisfaction with a hyper-casual game designed for the Indian audience. In order to understand about the same, there are items measuring the same that are picked from the set of questions to conduct a regression analysis.

The factor of overall user experience and enjoyability would be used as the independent variable in this model. It would be followed by the dependent variable used to understand the overall satisfaction level of the gamers.

Table 4.7 - Model Fit Measures– Overall Satisfaction															
								Overall Model Test							
Model		R		R ²		Adjusted R ²		F		df1		df2		p	
1		0.572		0.327		0.326		239		1		490		< .001	

Table 4.8 - Model Coefficients – Overall Satisfaction				
Predictor	Estimate	SE	t	p
Intercept	-1.17	0.2662	-4.38	< .001
Overall Gameplay experience & Enjoyability	1.25	0.0809	15.44	< .001

The results from the significant regression model generated above shows an adjusted R^2 value of 0.326. This reflects that the overall gameplay experience and enjoyability levels can cause 32.6% change in the overall satisfaction level of the players about the game. This states that with a positive estimate caused, the overall gameplay which can be enhanced using reward systems and game interface would lead to deriving a higher level of satisfaction among the Indian gamers of hyper-casual games. This hypothesis shows that whether it is the reward system or a visually appealing gaming interface, the impact that it causes on overall gaming experience would lead to a heightened level of satisfaction. The importance of reward systems and game interface is even more when considering the Indian hyper-casual gaming in India.

In an investigation understanding any suggestion from the respondents towards making their experience better in the market, the following list of responses with their frequency is shown below.

Table 4.9- Frequency of Suggestions

Suggestion	Frequency
Add more levels or stages	149
Include different game modes	246
Enhance graphics and visuals	148
Improve sound effects and music	246
Add more variety to rewards and achievements	147
Make controls more intuitive and responsive	147
Provide clearer instructions or tutorials	98
Increase the difficulty for more challenge	98
Add social features for interaction with friends	98

The most common suggestion provided by the respondents include – need to get more modes of game and improve sound effects and music. It is followed by adding more levels and enhancement of graphics and visuals. The list of suggestions and the frequency at which these are opted shows that the requirement for sound effects and music is quite high among the Indian gamers. Moreover, the game needs to increase options of mode and levels in order to gather more interest from the Indian gamers. The suggestions provided reassures the role of game interface in the process of increasing overall gaming experience.

5. DISCUSSION AND IMPLICATIONS

Hyper-casual mobile games are one of the renowned forms of games in the present mobile gaming industry. This type of game is known among its users as having features of simplicity, accessibility, and broad appeal. Some of the most noteworthy features in the hyper casual games that attract the gamers include its minimalistic design, easy-to-understand mechanics, and a focus on short, engaging gameplay sessions. While in case of traditional mobile games the involvement of complex narratives or in-depth strategies are observed, in the hyper-casual games a source of instant entertainment with little to no learning curve is seen. This nature of the game makes them highly addictive and universally appealing. It can hereby cater to different groups of individuals with their basic approach in design and mechanics.

Researchers in the past have talked about different aspects of gaming and one of the prominent theoretical models that engulfed the literature is the use of Technology Acceptance Model (TAM) by (Davis, 1989). It is a well-established framework used to understand and predict user acceptance of technology. Based on the effectiveness of factors such as perceived ease of use (PEOU) and perceived usefulness (PU), this model helps to align the

forces that impact on a user's decision making about adopting a technology. The diagrammatic representation of the model and its relationships measured is shown below.

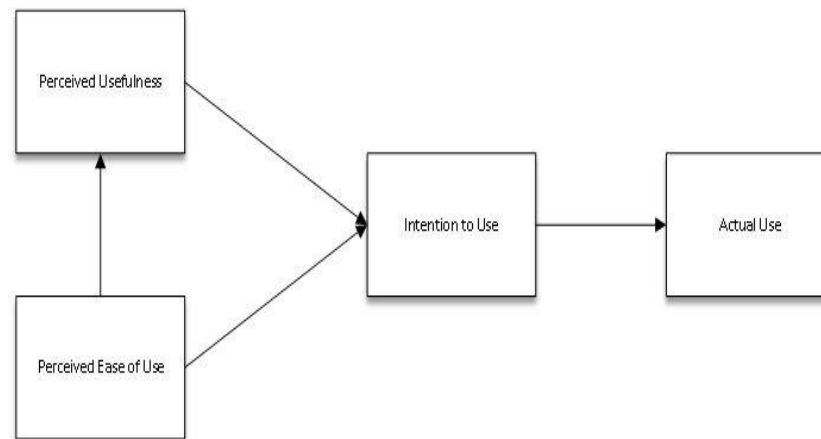


Figure 5.1 – Diagrammatic Representation of TAM

The dependent factors work with respect to the understanding about the intention to use and the actual usage that occurs as a result of the intention to use. When applied to mobile game apps, TAM provides valuable insights into how user interface (UI) and user experience (UX) design can influence player engagement, satisfaction, and overall acceptance of the game.

PEOU reflects one of the key components of the model. It represents the degree to which a user believes that using a particular system will be free of effort. In the context of hyper-casual games, PEOU can be closely related to the quality of the UI and UX design. A well-designed UI ensures that the game is intuitive and easy to navigate, minimizing cognitive load and allowing players to engage with the game without frustration or confusion. The factors used in this study such as game interface and control and mechanics associates items that investigate the effort required to operate the game. This does coincide with the aspect attempted to be measured in this model as well.

PU refers to the extent to which a user believes that using a particular system will enhance their performance or provide value. For hyper-casual games, this can be translated into how the game's features—such as the variety of levels, modes, and the quality of sound and visuals—contribute to the overall gaming experience. These elements are also included in this study that reflects the usefulness parameters of the game.

The study here moves beyond the TAM although it considers the same as the baseline for technology acceptance. As hyper-casual games and the retention of its users require a more rigorous form of investigation, the study here extends the factors and categorises them specifically to understand about the scenario in detail.

In this study, an experimental method involving a quantification of perspectives has been considered. The approach here included exposing the respondents in the study to a hyper-causal game and then recording their perspective about its different features immediately using a structured questionnaire. The study has used the Indian market as the area of investigation. As the Indian gaming market in the past years has grown exponentially, it is important that the investigation of hyper casual gaming is done. The Indian economy is growing in different aspects and it is important that an emerging area of entertainment such as the gaming models also contribute significantly towards it. Being an emerging economy, the contribution of every domain in the market can increase the development to a certain level. The hyper casual gaming scenario in the country is also increasing due to the characteristics of the game.

The regression conducted shows change in the revised system can lead to around 73% of alteration in the overall gaming experience. This shows that the reward system, especially when considering hyper casual games in the Indian market, is very essential to be fulfilling and satisfactory. The enhancement of user experience denotes the success of the game and when considering players from the Indian market, the importance to be given towards designing a proper reward system which is fulfilling in nature is very much required. The result of this analysis is similar to the ones provided by (Alexiou & Schippers, 2018; Goh et al., 2017; Mauroner, 2019; Yin & Xiao, 2022)

who also mentioned the important role of an efficient reward system in driving user experience during gaming. The color scheme of the game is also found to be highly appealing for its users. This mean score analysis creates an understanding of the most important elements in the gaming interface that can help to make the experience better. The importance with respect to the color scheme for the game and the music that accompanies must be high. These decisions in the game in accordance to the preferences of the gamers can lead to generating an efficient user interface and thereby increasing effectiveness of hyper casual games in India. There is similar evidence marked in the studies provided by (Jordan et al., 2012; Zoh et al., 2023) where focus on such parameters are highlighted for better gaming experiences.

Summarising the effort undertaken in this study, results highlight the critical importance of user interface (UI) and user experience (UX) in shaping the success of hyper-casual games, particularly in the competitive Indian gaming market. The demand for improved sound effects, music, diverse game modes, and enhanced visuals underscores the need for developers to focus on creating intuitive, engaging, and immersive gaming experiences. By addressing these key areas, developers can significantly enhance the perceived ease of use and perceived usefulness of their games, as suggested by the Technology Acceptance Model (TAM). Ultimately, prioritizing these elements will not only meet the evolving expectations of gamers but also drive greater acceptance, retention, and success in the hyper-casual gaming market.

In order to enhance the user interface as established in this study as an important parameter of user experience and satisfaction, for the Indian players, the following things can be implemented.

1. A simplified navigation using menus and controls which ensure a quick and easy navigation, reducing the cognitive load on players.
2. The layout in the game must be well-thought about. It must be designed in such a way that minimum instruction or support is required to find the controls.
3. Implementation of a responsive UI element combination can help. It would provide immediate visual feedback that can enhance interactivity and user engagement.
4. As the visual and sound appeal is very important to the Indian players, the customisation provisions especially in setting their visual and sound effects can cause a different level of engagement among the users.
5. Lastly, the visual indicators in the interface must be clear in order to avoid waiting time among the players to figure out the next step.

While these are recommendations based on the developers perspective for creating an effective user interface, there are other aspects based on the result that can be beneficial.

The significant impact of reward systems on user experience suggests that developers should implement more personalized and varied rewards. The potential held by rewards in generating optimum engagement is very high. Innovative rewards in the form of daily challenges, achievement badges, and in-game currency can increase player engagement and motivation, leading to longer play sessions and improved retention rates.

The emphasis on sound and music is not much thought about in such games. But the important role that it can play to generate user experience is quite evident. It highlights the need for professional audio design in hyper-casual games. Developers should consider incorporating culturally relevant music and dynamic sound effects that react to gameplay, which can create a more immersive experience and enhance player satisfaction. Moreover, customisation options to play their desired music and sound effects when playing can help in generating a higher level of interest. At the same time, given the strong influence of visual appeal, developers should prioritize high-quality graphics, including vibrant colors, smooth animations, and visually distinct characters or environments. Investing in better graphic design can make games more attractive and memorable, helping to differentiate them in a crowded market. The quality of animation used and the relatability of the graphics seen on screen can help the users to associate themselves better with the situation.

One of the important things to note is that keeping in mind the diverse range of devices used by Indian gamers, the need for hyper-casual games to run smoothly on low-end smartphones is crucial. In India especially in the rural area, the smartphones being used are from different ranges and providers. Some might not have high quality

of display and sound. So to retain those sections of users as well, developers should optimize games to be lightweight, with minimal load times and low battery consumption, without compromising on visual and audio quality. Most importantly, a user-centric design approach, where player feedback is regularly collected and incorporated into game updates, can lead to continuous improvement in UI/UX. By actively involving players in the development process, developers can ensure that their games remain aligned with user expectations and preferences, thereby increasing overall satisfaction and success in the market.

6. CONCLUSION

Hyper casual games in the present times have gained interest not only from gamers but also from developers and investors across the globe. It is due to its simplistic and easy operating nature that the number of interested users have increased significantly. Video games are virtual reality platforms that offer gaming experiences with high levels of involvement and skills to be able to enjoy them. Due to the requirement of various attributes for playing such games, the number of interested users are limited to a certain demographic. When talking about hyper casual games, the situation is different as it does not require much effort from the interested user to continue with this form of entertainment. Only with the use of the Internet and their smartphone device, these games can be accessed and played at any point of time during the day. Whether it is in between work breaks or spending time when bored, the use of hyper casual games can extend its services to different categories of users. As no prior expertise is required to play such games, the number of diverse users getting involved in this domain is increasing day by day. From the perspective of the developers, the free nature of these games allow many creative and innovative individuals to enter the market with a minimum capital. The open nature of the hyper casual market has attracted many developers who have uplifted the market with their innovative contributions.

With the increasing market of such games, many investors have also joined the market with every passing time. The advent of advertising and micro transactions as a part of revenue generation in the hyper casual games have also led to higher amounts of investment in the sector. This has increased the opportunities and the future holds more in terms of research such as the consideration of a similar study with a comparative approach among the gamers belonging to other nations. Another interesting study could be understanding the level of addiction and internet gaming disorder levels that might rise from being involved in hyper-casual games. Lastly, an investigation surrounding the detailed role of music and sound effects is required in the hyper-casual gaming scenario due to the amount of impact observed in this study.

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