

Consumer Engagement Through Gamification On E-Tailing Platform

Abstract

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Adopting e-tailing platforms recently among customers has created a challenge for e-tailers to engage customers for longer. However, Gamification is a new way for e-retailers to engage with their customers further. This research aims to recognize factors influencing consumer engagement through Gamification on such platforms. The study adopts the Stimulus-Organism-Response (S-O-R) model, Visual attractiveness, rewards and convenience are identified as stimuli, perceived enjoyment and social interaction as organisms and customer engagement as a response. The study collected 391 samples from online shoppers and analyzed them using Smart PLS. The findings vindicate the positive effects of perceived enjoyment and convenience on customer engagement. Apart from rewards, all other factors in the conceptual model are significant. However, customers also seek better rewards for perceived enjoyment and interacting about their achievements within their social groups. The findings of this study will contribute to the understanding of consumer engagement through Gamification on e-tail platforms

Keywords: Consumer Engagement, e-tail, Retail, e-retail, Gamification, Online Retail, SOR

How to cite this article: Tabeck, P.S., Jain, V. & Ahuja, V. (2024). Consumer Engagement Through Gamification On E-Tailing Platform. African Journal of Hospitality, Tourism and Leisure, 13(4):834-842. DOI: <https://doi.org/10.46222/ajhtl.19770720.570>

Introduction

E-Commerce is one of the biggest stories in retail. In the recent past, customers have been mass-migrated from offline to online platforms (McKinsey, 2022). This trend has been accelerated by smartphone devices, internet penetration, affordable internet, and convenience (Habib et al., 2022). App downloads have increased multi-fold. Many retailers with existing e-tailing platforms have cited record downloads, while others sought to make up ground (Briedis et al., 2020). Consumers have shifted their loyalties and continue using new trends and e-tails during and post-COVID-19 (McKinsey, 2022). Retailers must augment customer engagement on all relevant channels to match this increasing pace of customer migration from offline to online platforms. Consumer engagement is a psychological process that involves dynamism, devotion, interaction, and purpose (Van Doorn et al., 2010). Consumer engagement is essential in online brand communities (Brodie et al., 2013). In a recent virtual scenario, customer engagement behaviour is essential for companies. Many companies have launched initiatives to stimulate customer engagement (Beckers et al., 2018). Several e-tailers like Amazon, Flipkart and Myntra implemented Gamification on their platforms to enhance consumer engagement. 280 million consumers in India use e-tailing platforms, which is estimated to increase 2.5-fold in the next decade (Jain et al., 2022). Marketers are using Gamification in various industries, namely, education (Surendeg et al., 2014), tourism (Sigala, 2015), services (Huotari & Hamari, 2017), grocery retailing (Pour et al., 2021), and e-marketing (Noorbehbahani et al., 2019). Even though gamification has been attracting considerable interest in various fields of marketing, academicians have yet to test thoroughly and research consumer engagement on e-tailing platforms. Most marketing studies focus on branding, i.e., brand awareness, co-creation, and attitude (Milanesi et al., 2022). Furthermore, most previous studies have addressed aspects related to perceived value (Yu et al., 2022), brand love (Hsu & Chen, 2018), and perceived experience (Poncin et al., 2017). Customer engagement on e-tail platforms is one central unexplored research area. The present research has also considered e-tail gamification-related studies; we found that research has been done on adoption (Kusumawardani et al., 2023), consumer purchase (Che et al., 2023) and online purchase intention (Wu & Santana, 2022). Subsequently, how to engage customers on e-tailing platforms is the biggest challenge for researchers and practitioners; hence, the research question set for the present paper is how does Gamification stimulate the consumer on e-tailing platforms for better response, ensuring higher engagement? Currently, consumer gamification research has examined the gamification design on consumer purchase (Che et al., 2023) by adopting gratification theory, the impact of gamification design on purchase intention by adopting the MDA framework (Kaur et al., 2023), consumer gamification and value co-creation by using DART model (García-Magro et al., 2023). Past literature is limited to examining purchases through gamification. However, the shortcoming of past literature is that it did not address customer engagement through gamification. Let us explore the relationship between the variables under the S-O-R framework. Usually, customers seek certain stimuli while using gamification on e-tail platforms. The researchers adopted the S-O-R model for various studies to understand the stimulus and response. While exploring the literature, we found that the S-O-R model has been adopted to understand impulse buying behaviour (Pereira et al., 2023), gamification in behavioural change (Ourdas & Ponis, 2023), panic and impulsive buying (Lavuri et al., 2023), impulse purchase in social commerce (Zhang et al., 2023), but the use of S-O-R model to investigate the gamification and engagement has not been adopted. To accomplish the research objective, we attempted to create a theoretical model to study the impact of e-tailer's virtual environment gamification stimulus, i.e., Rewards, Virtual attractiveness, and convenience, on the organism as perceived enjoyment and social interaction ultimately response as customer engagement.



Theoretical background

Gamification has been a rising trend for over a decade and is now used worldwide in various areas, ranging from business to education (Jakubowski, 2014). The term "gamification" was coined around 2001 by Nick Pelling. It involves applying game design techniques, thinking, and mechanics to enhance non-game contexts. Gamification typically refers to the incorporation of these elements into non-game applications and processes to encourage user engagement and acceptance (Marczewski, 2013). Furthermore, gamification designs are partially based on elements of digital games (Bittner et al., 2014). It helps consumers engage with various contexts not traditionally associated with games (Ciuchita et al., 2023).

e-tailing platforms and gamification

Although Gamification is adopted by many e-retailers worldwide, academic interest in examining the issue is still developing. The most popular theme related to examining Gamification is from the customer's perspective. For instance, an empirical study that attempted to discover why customers play games on mobile commerce platforms indicated the importance of utilitarian, hedonic, and social value (Yu et al., 2022). As online retail grows, there is an increasing interest in enhancing customer experience (Insley & Nunan, 2014). Gamification increases customer engagement and reduces incidences of undesirable consumer behaviour. The applications of Gamification have become a priority for many e-tailers as a unique method to engage consumers.

S-O-R model

Meharbian & Russell (1974) proposed the stimulus-organism and Response model, which explains the impact of environmental stimuli on organisms and results in response. Since then, different domains have adopted the S-O-R model to study the impact of environmental stimuli on consumer response. Meharbian & Russell (1974) also conceptualized their model for various environments, which has been applied in retail and service industries. The model provides a fundamental understanding of the influence of the social environment on customers (Goeltom et al., 2023). Researchers used the S-O-R model to study customer engagement through Gamification in an e-tail environment. Gatautis et al. (2016) also adopted the S-O-R model to study Gamification to drive online consumer behaviour. They considered game components to be stimuli (S), game mechanics to be organisms (O), and game dynamics to be responses (R). Furthermore, Shao et al. (2019) considered achievements, i.e., Reward Giving and Member Badge Upgrading as Stimulus, Perceived Enjoyment and Social Interaction as Organisms, and Impulse Purchase as Response in an online impulse purchase environment.

Customer engagement through gamification

Pansari & Kumar (2017) defined Customer engagement as the process of a customer's value addition to the business. The contribution is either direct or indirect. Direct contribution comprises buying, while indirect contribution includes referrals, influence, and knowledge. Engagement is the most common objective adopted by most social and technical systems because of its widely acknowledged effects on enhancing user acceptance and engagement (Xiao et al., 2020). Customer engagement is difficult on online platforms, specifically e-tailing applications and websites. Online retailers should customize their efforts to enhance customer engagement (Persson et al., 2015). To increase customer engagement, it is evident that the e-tailers are using Gamification as a tool. Gamification effectively increases engagement in online programs (Looyestyn et al., 2017). Customer engagement can be achieved by attaching Gamification to the application to create excitement and fun experiences among customers (Hammedi et al., 2019, Djohan et al., 2022). Gamification can create a fully engaged customer experience via creative and personalized shopping excursions (Durugboet al., 2012). The primary goal of Gamification is to enhance engagement on multiple platforms. Some researchers used consumer engagement through Gamification for value co-creation (Pilgrimiené et al., 2015), while the present research concentrates on consumer engagement as a response to Gamification. Additionally, a few studies show that Gamification can be a factor in boosting customer engagement (Ruengaramrut, 2022). E-tailers have adopted many gamified elements, including customer rewards, discounts, badges, and membership benefits, to name a few. Games offer enjoyment, a sense of achievement, social interaction, and uncertain quantifiable rewards and help e-tailers to engage with customers. Games on e-tailing platforms are designed around various product categories, discount schemes, and new launches, creating brand awareness and customer purchases. Eisingerich et al. (2019), proposed that Gamification also creates value for customers directly by guiding and motivating them. Gamification can enhance customers' desire to make decisions and establish a convenient way to help customers achieve their objectives.

Research model and hypothesis development

To study the significant factors impacting customer engagement, the effectiveness of loyalty programs (Hwang & Choi, 2020), and brand engagement (Bagheri & Abadi, 2022) adopted various theories and existing models such as Cognitive evaluation theory (Hsu, 2022), Use and Gratification Theory and Theory of Planned Behaviour (Rialti et al., 2022), Customer Perceived Value (Yu & Huang, 2022) and Self Determination Theory (Hollebeek et al., 2021). An in-depth scrutiny of most of the models these theories adopt reveals the significance of considering an academically accepted foundation suited to the customer's viewpoint. Thus, the current study adopted the S-O-R model as the theoretical foundation of the proposed research model. The S-O-R model covers constructs about e-tailing, such as rewards and convenience in stimulus, enjoyment, and social interaction in the organism, as well as consumer engagement in response. The proposed research model is presented in Figure 1. The proposed model features how gamification stimuli influence a customer's organism, i.e., social interaction and perceived enjoyment, which results in response as engagement.



Rewards

Rewards are perceived as a core gamification strategy for users who accomplish the requested tasks (Park et al., 2014). Marketers commonly use rewards in interventions to change behaviour (Lewis et al., 2016). Customers pay more attention to rewards in gamification than any other stimuli (Tsai et al., 2022). Rewards boost perceived enjoyment and social interaction (Kaur et al., 2023). In the current study, rewards will have an impact on customer engagement. When customers receive rewards on e-tailing platforms, it leads to perceived enjoyment and social interaction, resulting in engagement (Conaway et al., 2014). Rewards are a helpful strategy in Gamification (Günther et al., 2020) to engage customers. The following hypothesis has been proposed to understand the impact of rewards:

- H1: Rewards positively affect the perceived enjoyment of engaging customers while playing games on e-tailing platforms.
- H2: Rewards positively affect social interaction by engaging customers while playing games on e-tailing platforms

Convenience

The Gamification of the e-tailing platform serves as a convenience for customers (Lai et al., 2021), as they need not toggle between different applications, and the same app serves a need for playing games, too. Convenience on the e-tail platform can be defined as less effort to play games and time management (McLean, 2018). Studies have explained that convenience positively impacts Gamification (Kim et al., 2020). Hence, hypotheses 3 and 4 have been set to check the impact of convenience on perceived enjoyment and social interaction:

- H3: Convenience positively affects the perceived enjoyment of engaging customers while playing games on e-tailing platforms.
- H4: Convenience positively affects social interaction by engaging customers while playing games on e-tailing platforms

Visual attractiveness

The visual attractiveness of the game can trigger the use of Gamification. It can be defined as "the degree to which a person believes that a website is aesthetically pleasing to the eyes" Van der Heijden (2003). Based on Visual attractiveness, the customers form their first impression of a product or web interface (Mishra et al., 2015). Van der Heijden (2003) showed that the visual attractiveness of websites impacts perceived enjoyment. People not only perceive enjoyment but rather engage in Gamification due to its visual attractiveness (Vashisht et al., 2019). Visual attractiveness appeals to consumers (Nour et al., 2018) and leads to perceived enjoyment:

- H5: Visual Attractiveness positively affects the perceived enjoyment of engaging the customer while playing games on e-tailing platforms

Perceived enjoyment

The extent to which the use of the information system is perceived as enjoyable on its own is Perceived enjoyment (Davis, 1989). Enjoyment is essential for a good customer experience (Venkatesh et al., 2012). Perceived enjoyment is the strongest predictor of engagement (Yang, 2017). Praveena et al. (2014) defined perceived enjoyment as an intrinsic motivation factor that emphasizes the usage process and reflects the pleasure and enjoyment associated with system usage. In their study, Zhang et al. (2021) found that perceived enjoyment substantially impacts Gamification and its outcomes. Thus, it is logical to hypothesize:

- H6: Perceived enjoyment positively affects customer engagement on e-tailing platforms

Social interaction

Social interaction can be defined as a website /app's ability to help customers stay in touch with friends and others (Eisingerich et al., 2019). Social interactions are critical drivers of flow for gamification users (Lee et al., 2022), and social interaction with affective incentives fosters a positive sense of engagement (Bai et al., 2017). Social interaction also drives users' engagement at different levels (Nivedhitha, 2022). Accordingly, we proposed the following hypotheses:

- H7: Social interaction positively affects customer engagement on e-tailing platforms

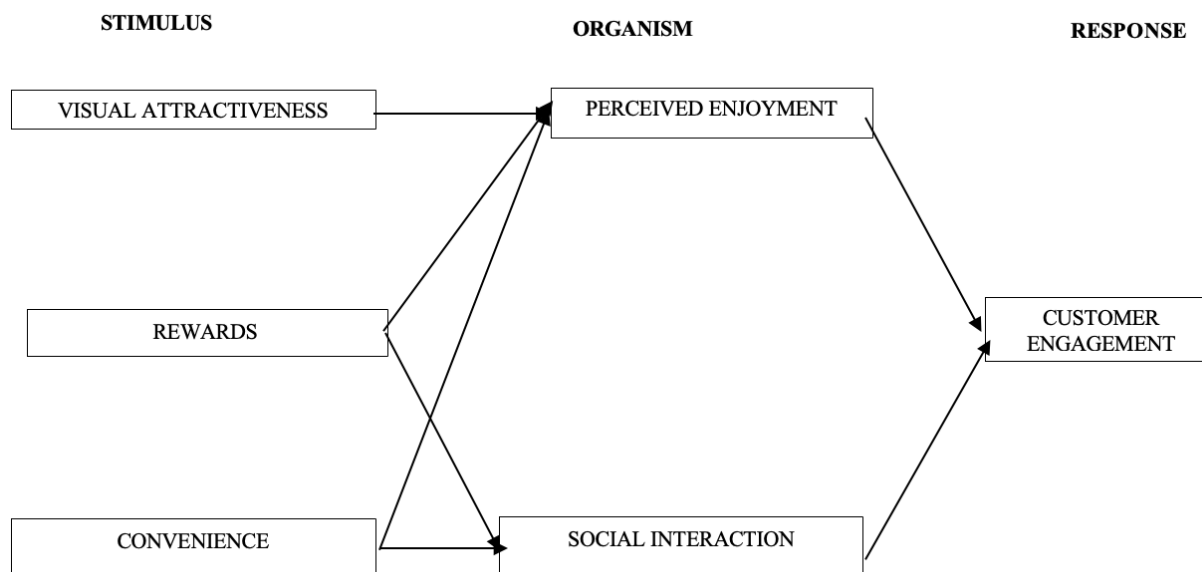


Figure 1: Conceptual framework
 Source: Authors compilation

Research methodology

A descriptive research design was selected for the study based on the insights collected from the literature review. The development of the questionnaire, sampling method, data gathering, and diagnostic tools are presented further. For all the scales employed for measuring the construct from the past literature, some research contexts have been modified (Appendix A). Scale items were used to measure all the constructs used in a theoretical framework. A five-point Likert scale (1=Strongly disagree, 5=strongly agree) has been taken to measure all the items. Furthermore, a range of questions were posed to obtain demographic data from participants. Data was collected from e-tail application users in India through a survey method. A judgmental sampling technique has been used to collect data, as the respondents need to be aware of games available on e-tail platforms, and in the past, they must have had some experience with those games. The purpose of the study was explained to the respondents. The respondents were selected based on a preliminary question (Have you played games on an e-tailer application?). The Data was collected from the users of e-tail platforms who played games from May 2023 to June 2023. A total of 480 questionnaires were distributed, of which 391 usable responses were collected, with a response rate of 81.45%. It can easily be observed that the data are comparable regarding gender distribution (Table 1).

Table 1: Respondent's Demographics

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	222	56.77
	Female	169	43.22
Age	18-24 years	135	34.52
	25-34 years	128	32.73
	35-44 years	109	27.87
	45-55 years	19	4.85
Education	Completed School	28	7.16
	Graduation	181	46.29
	Master's degree or above	172	43.98
	Others	10	2.55
Frequency of Using App	2-4 times a Day	217	54.73
	Several times a day	97	24.8
	Everyday	73	18.64
	Once in Week	4	1.02

Data analysis

Researchers have used the PLS-SEM approach Hair et al. (2017) suggested to estimate the path models for their research. Hence, this is suitable to obtain meaningful solutions in different situations, specifically where the sample size is small. It requires fewer assumptions about data distributions. The Smart PLS version 4.0 software was used to assess the path model.



Measurement model evaluation

The measures' internal reliability is checked by observing Cronbach's Alpha values. These are in the desired range of 0.73-0.90. Joreskog composite reliability values indicate that the values found have a higher level of reliability for all the constructs. Further, the Average Variance Construct (AVE) is calculated to substantiate the convergent validity of constructs. This value ranged between 0.60-0.78. The minimum acceptable range of AVE is 0.50 (Hair et al., 2022); thus, it demonstrates an adequate level. (Table 2) shows the Cronbach's Alpha, rho A, Composite Reliability, and AVE estimates of all constructs.

Table 2: Cronbach's Alpha, CR and AVE

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Convenience	0.832	0.837	0.900	0.752
Customer Engagement	0.900	0.921	0.928	0.689
Perceived Enjoyment	0.862	0.869	0.916	0.784
Rewards	0.739	0.681	0.821	0.607
Social Interaction	0.754	0.759	0.859	0.671
Visual Attractiveness	0.904	0.93	0.933	0.778

It is reiterated that correlations between theoretically similar measures (i.e., convergent validity) should be "relatively high." In contrast, correlations between theoretically different measures (i.e., discriminant validity) should be "relatively low," as shown in Table 3 below.

Table 3: Discriminant validity

	Convenience	Customer Engagement	Perceived Enjoyment	Rewards	Social Interaction	Visual Attractiveness
Convenience						
Customer Engagement	0.589					
Perceived Enjoyment	0.839	0.656				
Rewards	0.05	0.131	0.069			
Social Interaction	0.727	0.853	0.591	0.031		
Visual Attractiveness	0.898	0.437	0.876	0.043	0.558	

Structural model assessment

A bootstrap sample 5000 was employed in the PLS path model to estimate the significance of path coefficients. The results for the hypothesized model are presented in Table 4. Except for rewards ($\beta = -0.031$, $p = 0.568$), all the other paths have been statistically found to be significant. Further rewards also significantly deter perceived enjoyment ($\beta = .043$, $p = 0.275$). Overall, hypotheses H3, H4, H5, H6 & H7 are validated, although H1 and H2 are not substantiated. The base model explained a 56.4% variance in user customer engagement. The results indicate that the poor model fits the proposed model well. The standardized root-mean-square residual value of 0.188 exceeds the threshold value of 0.08 (Hu et al.,1998)

Table 4: Hypothesis testing results

Hypothesized paths	Coefficients	t-statistics	P Values	Results
Convenience -> Perceived Enjoyment	0.251	4.244	0	supported
Convenience -> Social Interaction	0.580	15.38	0	supported
Perceived Enjoyment -> Customer Engagement	0.290	7.161	0	supported
Rewards -> Perceived Enjoyment	0.043	1.091	0.275	Not supported
Rewards -> Social Interaction	-0.031	0.572	0.568	Not supported
Social Interaction -> Customer Engagement	0.566	14.48	0	supported
Visual attractiveness -> Perceived Enjoyment	0.595	11.148	0	supported

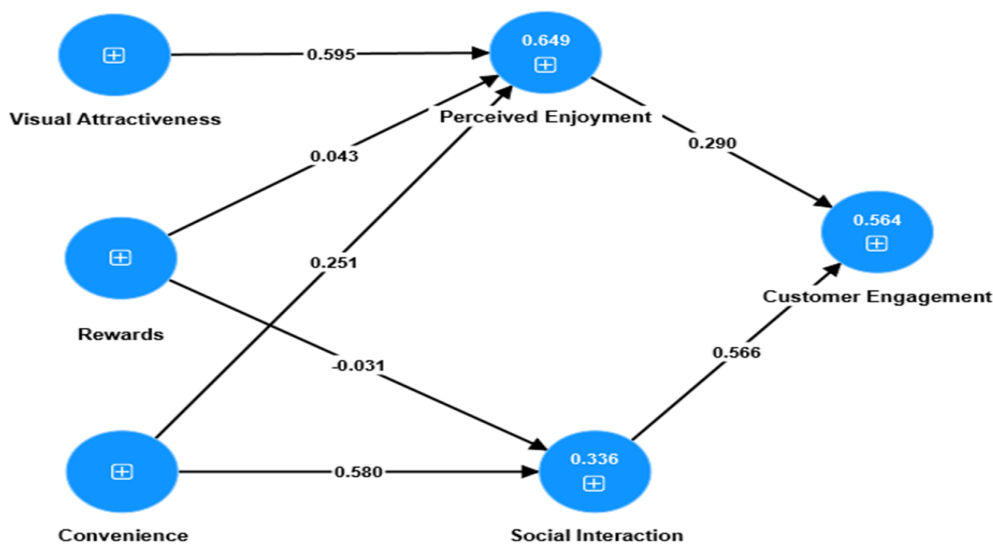


Figure 2: Path Model, Source: Prepared by The Authors (using Smart PLS version 4.0)



Discussion

Gamification became one of the most critical levers of engagement (Khodabandelou et al., 2023 & Hassan et al., 2024). Responding to customer engagement through customer gamification on e-commerce sites, we utilized the framework and validated the model about the same. We considered visual attractiveness, rewards, and convenience as a stimulus for playing games on e-commerce apps, leading to perceived enjoyment and social interaction—both social interaction and perceived enjoyment impact customer engagement as a response. In the present study, social interaction positively impacts customer engagement. It is aligned with previous research on Gamification, where social interaction has positively impacted behavioural intention and perceived enjoyment (Raman, 2020). In addition, our findings depict that convenience positively impacts perceived enjoyment. Convenience impacts acceptance of games (Anh et al., 2023) and perceived enjoyment. Moreover, Ghanbary et al. (2022) noted that convenience could be considered one of the reasons for perceived enjoyment on online platforms. Many studies (Marza et al., 2019; Swilley et al., 2013) confirmed that convenience is a motivation to influence perceived enjoyment. The other finding of the study is that the Convenience of gamification on e-tailing platforms also leads to social interaction and easy-to-use apps, and the convenience of the same platforms also supports the same (Sun & Xing, 2023). Another noteworthy finding of this study is that the perceived enjoyment of the consumer has a positive impact on engagement. Santos-Vijande et al. (2022) also observed that enjoyment leads to app user engagement. Next, it was noted that Reward was an inhibitor of perceived enjoyment. One plausible justification is that it may happen in some instances when customers cannot get any rewards. This is supported by previous research, which found that rewards only lead to perceived enjoyment if it is substantial (Lee & Lu, 2023). Therefore, the role of positive rewards in influencing perceived enjoyment cannot be disapproved. Rewards expectation violation can lead to the negative behaviour of consumers (Zhou et al., 2023). Hence, examining the role of positive and negative rewards with Gamification in future research is advisable for a more nuanced understanding of this phenomenon. Interestingly, in this study, Rewards hurt social interaction, which is contrary to the findings of Kim et al. (2022) in their study on gamification aspects of health apps. Visual attractiveness has a significant impact on perceived enjoyment. It is analogous to the findings of Su et al. (2021). Visual Attractiveness impacts users' aesthetic satisfaction (Herm, 2023); aesthetics in gamification enhances visual attractiveness and results in users' perceived enjoyment (Gironella, 2023), and the present research supports the same.

Theoretical and practical implications

While countless studies have been available on Gamification and customer engagement, only some have focused on both engagement and Gamification. The present study, thus, differentiates the available research by focusing on both aspects of gamification and engagement. In this research, we considered the visual attractiveness, convenience, and rewards of playing games on the same platform as the stimulus. E-tailers need to pay attention to these elements for better engagement. As visual attractiveness impacts perceived enjoyment, e-tailers should focus on visual elements, colours, and design of the games. This study proves that social interaction has a positive impact on engagement. When customers have the opportunity to share their experiences and a sense of pride with others, it leads to better engagement (Simumba & Nchito, 2018). As social interaction is essential in the Indian scenario, people love to talk about their achievements with peer groups, family, and friends. Adding a chat function in the game improves social interaction between groups (Hsao & Tang, 2021) and creates a better customer experience. Hence, it is suggested that e-tailers add chat functionality. In the present research, rewards do not impact perceived enjoyment. Rewards are major gamification stimuli if substantial in size. The unexpected Reward to customers boosts purchases, average spend value, and basket size (Spais et al., 2022) and also leads to perceived enjoyment. Hence, marketers need to concentrate on substantial and unexpected customer rewards. The better the rewards are, the more interaction and engagement will result.

Conclusion

Given the importance of customer engagement in e-tail platforms, understanding ways to enhance customer engagement is an integral part of the strategy. This research demonstrates how gamification elements can work as a stimulus for customers to get a better response in the form of engagement. Gamification helps to retain consumers by engaging and entertaining them (Srivastava et al., 2021). Gamification is one of the modern tools for e-tailers to increase engagement and provides the decision-makers with the justification to agree upon future investments. Enhancing engagement through various strategies is vital, given the importance of customer experience to e-tailers. The more they engage, the more they buy. Previous studies on Gamification explored the underlying assumption of Gamification on purchase intention (Yu & Huang, 2022; Gao & Wu, 2022), while the present study suggests that Gamification on e-tailing platforms can enhance customer engagement. This research aims to identify various stimuli and organism factors to get the output of engagement as a response. The findings vindicate the positive effects of perceived enjoyment on customer engagement. Apart from rewards, all other factors in the conceptual model are significant. However, customers also seek better rewards for perceived enjoyment and interacting about their achievements within their social groups. The research findings contribute to the knowledge related to consumer engagement through Gamification on e-tail platforms.

Limitations and scope for future research

Our research has some limitations, which may serve as avenues for future research. First, data was collected from Indian users, limiting the findings' generalizability. Future research may collect data from different geographical regions with different samples. Second, we collected data with the help of questionnaires through the survey method, and a few respondents responded very casually. Future research may use other qualitative methods, such as experimental and focus groups, to further understand customer engagement. Third, our research used the S-O-R model to understand engagement, and future research can use other models to understand engagement. Further, in the present research, we did not define rewards as tangible or intangible, which may be one of the reasons our hypotheses related to rewards positively affecting the perceived enjoyment do not get supported; future researchers may focus on the type of rewards provided by e-tailers. Consumer insights serve as a key benchmark for enhancing engagement (Heerden, 2017); future research could further explore this variable. Future research could also examine how advertising appeals, product involvement, and construal levels impact consumer engagement in gamification (Fikouie et al., 2022). We focused on customer engagement as the response in our model, and customer engagement reflects on three nodes. At the same time, this research does not consider whether these nodes are positive, ambivalent, or hostile in engagement (Azer & Alexander, 2020). The study didn't consider e-tailers promotional efforts like effective advertisement (Akbari et al., 2021); future research may include it as one of the stimulus parameters. Finally, with the advent of technology, gamification has improved, and e-tailers are adopting Metaverse, Artificial Intelligence, Virtual Reality, and newer communication interfaces. All these aspects can be considered in future research to explore the impact on customer engagement.



References

- Akbari, M. & Moradipour, S. (2021). Horses for Courses: B2B Salesperson Performance: The Role of Their Characteristics and Promotion Efforts. *Middle East Journal of Management*, 8(4), 297-318. <https://doi.org/10.1504/MEJM.2021.116440>
- Anh, T., Anh, V., Quynh, N., Le, N., Huyen, T. & Trung, H. (2023). Factors Affecting the Acceptance of Gamification Application in E-banking. *International Journal of Data and Network Science*, 7(2), 601-608. [10.5267/j.ijdns.2023.3.011](https://doi.org/10.5267/j.ijdns.2023.3.011)
- Azer, J. & Alexander, M. (2020). Negative Customer Engagement Behaviour: The Interplay of Intensity and Valence in Online Networks. *Journal of Marketing Management*, 36(3-4), 361-383. <https://doi.org/10.1080/0267257X.2020.1735488>
- Bagheri, M. & Saeid Abadi, M. (2022). A Model for Evaluating the Effects of Gamification on Brand Engagement. *Quarterly Journal of Brand Management*, 8(4), 53-102.
- Bai, Y., Maruskin, L.A., Chen, S., Gordon, A.M., Stellar, J.E., McNeil, G.D., Peng, K. & Keltner, D. (2017). Awe, the Diminished Self, and Collective Engagement: Universals and Cultural Variations in the Small Self. *Journal of Personality and Social Psychology*, 113(2), 185. <https://doi.org/10.1037/pspa0000087>
- Bagozzi, R.P. & Edwards, J.R. (1998). A General Approach for Representing Constructs in Organizational Research. *Organizational Research Methods*, 1(1), 45-87. doi:10.1177/109442819800100104
- Beckers, S.F., Van Doorn, J. & Verhoef, P.C. (2018). Good, Better, Engaged? The Effect of Company-Initiated Customer Engagement Behavior on Shareholder Value. *Journal of the Academy of Marketing Science*, 46, 366-383. <https://doi.org/10.1007/s11747-017-0539-4>
- Bittner, J.V. & Shipper, J. (2014). Motivational Effects and Age Differences of Gamification in Product Advertising. *Journal of Consumer Marketing*, 31(5), 391-400. [10.1108/JCM-04-2014-0945](https://doi.org/10.1108/JCM-04-2014-0945)
- Briedis, H., Kronschnabl, A., Rodriguez, A. & Ungerman, K., (2020). Adapting to the Next Normal in Retail: The Customer Experience Imperative. McKinsey & Company, 14.
- Brodie, R.J., Ilic, A., Juric, B. & Hollebeek, L. (2013). Consumer Engagement in a Virtual Brand Community: An Exploratory Analysis. *Journal of Business Research*, 66(1), 105-114. <https://doi.org/10.1016/j.jbusres.2011.07.029>
- Che, T., Peng, Y., Zhou, Q., Dickey, A. & Lai, F. (2023). The Impacts of Gamification Designs on Consumer Purchase: A Use and Gratification Theory Perspective. *Electronic Commerce Research and Applications*, 59, 101268. <https://doi.org/10.1016/j.elerap.2023.101268>
- Conaway, R. & Garay, M.C. (2014). Gamification and Service Marketing. *SpringerPlus*, 3, 1-11.
- Ciuchita, R., Heller, J., Köcher, S., Köcher, S., Leclercq, T., Sidaoui, K. & Stead, S. (2023). It is Really Not a Game: An Integrative Review of Gamification for Service Research. *Journal of Service Research*, 26(1) 3-20. https://doi.org/10.1177_10946705221076272
- Djohan, S.A., Handhana, D., Castafiore, V.B. & Hendriana, E. (2022). Can Gamification Stimulate Customers to Repurchase in the E-Marketplace? The Mediation Effect of Customer Experience and Engagement. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(1), 4781-4796.
- Durugbo, C. & Kalverkamp, M. (2012). Uncovering Requirements Using Serious Games. In *2012 18th International ICE Conference on Engineering, Technology and Innovation* 1-10. IEEE.
- Eisingerich, A.B., Marchand, A., Fritze, M.P. & Dong, L. (2019). Hook vs. Hope: How to Enhance Customer Engagement through Gamification. *International Journal of Research in Marketing*, 36(2), 200-215. <https://doi.org/10.1016/j.ijresmar.2019.02.003>
- Fikouie, M., Akbari, M., Ebrahimipour, M. & Moradipour, S. (2022). Seeing the Forest through Trees: Advertising Appeals, Product Involvement, and Construal Level. *Middle East Journal of Management*, 9(4), 372-394.
- García-Magro, C., Martín-Peña, M.L. & Sánchez-López, J.M. (2022). Emotional Mechanics of Gamification and Value Co-Creation: the Digital Platform Nike+ as a B2B2C ecosystem. *Journal of Business & Industrial Marketing*, 38(2), 414-428. <https://doi.org/10.1108/JBIM-12-2021-0568>
- Gao, Y. & Wu, Z. (2022). Does Gamification Increase Purchase Intention? A Systematic Review. In *International Conference on Human-Computer Interaction* 327-339. Springer, Cham. https://doi.org/10.1007/978-3-031-05637-6_20
- Gatautis, R., Vitkauskaitė, E., Gadeikiene, A. & Piligrimiene, Z. (2016). Gamification as a Mean of Driving Online Consumer Behaviour: SOR Model Perspective. *Engineering Economics*, 27(1), 90-97. <https://doi.org/10.5755/j01.ee.27.1.13198>
- Ghanbary, S., Sharifi, S.M. & Momeni, S. (2022). OFD Platform: Consumers' Persuasion based on Economic, Relational and Enjoyment Values. *Journal of Foodservice Business Research*, 25(3), 329-352. <https://doi.org/10.1080/15378020.2021.1950509>
- Gironella, F. (2023). Gamification Pedagogy: A Motivational Approach to Student-Centric Course Design in Higher Education. *Journal of University Teaching and Learning Practice*, 20(3), 4. <https://doi.org/10.53761/1.20.3.04>
- Goeltom, A.D.L., Hurriyati, R., Gaffar, R., Wibowo, L.A. & Susanto, E. (2023). Antecedents of Smart Tourism Destination Perceived Attractiveness. *African Journal of Hospitality, Tourism and Leisure*, 12(4), 1542-1556. <https://doi.org/10.46222/ajhtl.19770720.448>
- Günther, M., Kacperski, C. & Kreams, J.F. (2020). Can Electric Vehicle Drivers be Persuaded to Eco-Drive? A Field Study of Feedback, Gamification and Financial Rewards in Germany. *Energy Research & Social Science*, 63, 101407. <https://doi.org/10.1016/j.erss.2019.101407>
- Habib, A., Irfan, M. & Shahzad, M. (2022). Modeling the Enablers of Online Consumer Engagement and Platform Preference in Online Food Delivery Platforms during COVID-19. *Future Business Journal*, 8(1), 6. <https://doi.org/10.1186/s43093-022-00119-7>
- Hair Jr, J.F., Matthews, L.M., Matthews, R.L. & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated Guidelines on Which Method to Use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123. <https://doi.org/10.1504/IJMDA.2017.087624>
- Hair Jr, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S., Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. & Danks, N.P. (2021). *An Introduction to Structural Equation Modeling. Partial Least Squares Structural Equation Modeling (PLS-SEM) using R: A Workbook*, 1-29. https://doi.org/10.1007/978-3-030-80519-7_1
- Hammedi, W., Leclercq, T. & Poncin, I. (2019). Customer engagement: The Role of Gamification. In *Handbook of Research on Customer Engagement* 164-185. Edward Elgar Publishing. <https://doi.org/10.4337/9781788114899.00014>
- Hassan, T.H., Al-Hyari, H.S., Helal, M.Y., Elshawarbi, N.E., Mahamoud, H.M.E., Hashish, M.E.S., Anas, A.M., Bilalov, B., Ahmed, I.S. & Moustafa, F.A.S. (2024). Meeting Online Customers' Expectations: How Do E-Service Quality and EReputation Impact Restaurant E-Customer Satisfaction? *African Journal of Hospitality, Tourism and Leisure*, 13(3), 494-503. <https://doi.org/10.46222/ajhtl.19770720.533>
- Herm, L.V., Janiesch, C., Helm, A., Imgrund, F., Hofmann, A. & Winkelmann, A. (2023). A Framework for Implementing Robotic Process Automation Projects. *Information Systems and e-Business Management*, 21(1), 1-35. <https://doi.org/10.1007/s10257-022-00553-8>
- Hollebeek, L.D., Glynn, M.S. & Brodie, R.J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, 28(2), 149-165. <https://doi.org/10.1016/j.intmar.2013.12.0>
- Hollebeek, L.D., Das, K. & Shukla, Y. (2021). Game on! How Gamified Loyalty Programs Boost Customer Engagement Value. *International Journal of Information Management*, 61, 102308. <https://doi.org/10.1016/j.ijinfomgt.2021.102308>
- Hu, L.T. & Bentler, P.M. (1998). Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification. *Psychological Methods*, 3(4), 424. <https://doi.org/10.1037/1082-989X.3.4.424>
- Huotari, K. & Hamari, J. (2017). A Definition for Gamification: Anchoring Gamification in the Service Marketing Literature. *Electronic markets*, 27(1), 21-31. <https://doi.org/10.1007/s12525-015-0212-z>
- Hsiao, C.H. & Tang, K.Y. (2021). Who Captures Whom—Pokémon or Tourists? A Perspective of the Stimulus-Organism-Response Model. *International Journal of Information Management*, 61, 102312. <https://doi.org/10.1016/j.ijinfomgt.2021.102312>
- Hsu, C.L. & Chen, M.C. (2018). How Gamification Marketing Activities Motivate Desirable Consumer Behaviors: Focusing on the Role of Brand Love. *Computers in Human Behavior*, 88, 121-133. <https://doi.org/10.1016/j.chb.2018.06.037>



- Hsu, C.L. (2022). Applying Cognitive Evaluation Theory to Analyze the Impact of Gamification Mechanics on User Engagement in Resource Recycling. *Information & Management*, 59(2),103602. <https://doi.org/10.1016/j.im.2022.103602>
- Hwang, J. & Choi, L. (2020). Having Fun While Receiving Rewards?: Exploration of Gamification in Loyalty Programs for Consumer Loyalty. *Journal of Business Research*, 106, 365-376. <https://doi.org/10.1016/j.jbusres.2019.01.031>
- Insley, V. & Nunan, D., (2014). Gamification and the Online Retail Experience. *International Journal of Retail & Distribution Management*, 42(5),340-351. <https://doi.org/10.1108/IJRDM-01-2013-0030>
- Jain, N., Sanghi, K. & Balaji, N. (2022). Ten Things You Should Know About E-Commerce in India. [online] Available at: <https://web-assets.bcg.com/09/9e/3cf5c702473fa0c5bb1008c7498e/bcg-ten-things-you-should-know-about-e-commerce-in-india-jun-2022.pdf>.
- Jakubowski, M., (2014). Gamification in Business and Education—Project of Gamified Course for University Students. In *Developments in Business Simulation and Experiential Learning: Proceedings of the Annual ABSEL Conference* 41.
- Kaur, J., Lavuri, R., Parida, R. & Singh, S.V. (2023). Exploring the Impact of Gamification Elements in Brand Apps on the Purchase Intention of Consumers. *Journal of Global Information Management (JGIM)*, 31(1),1-30. [10.4018/JGIM.317216](https://doi.org/10.4018/JGIM.317216)
- Kim, H.M., Cho, I. & Kim, M. (2023). Gamification Aspects of Fitness Apps: Implications of mHealth for Physical Activities. *International Journal of Human-Computer Interaction*, 39(10), 2076-2089. <https://doi.org/10.1080/10447318.2022.2073322>
- Kim, H.J. & Lee, J.M. (2020). Consumers' Resistance and Continued Use Intention of Self-service Kiosk. *Human Ecology Research*, 58(3),401-416. <https://doi.org/10.6115/fer.2020.029>
- Khodabandelou, R., Roghanian, P., Gheysari, H. & Amoozegar, A. (2023). A Systematic Review of Gamification in Organizational Learning. *The Learning Organization*, 30(2), 251-272. <https://doi.org/10.1108/TLO-05-2022-0057>
- Kusumawardani, K.A., Widyanto, H.A. & Tambunan, J.E.G. (2023). The role of Gamification, Social, Hedonic and Utilitarian Values on e-commerce Adoption. *Spanish Journal of Marketing-ESIC*, 27(2),158-177. <https://doi.org/10.1108/SJME-09-2022-0188>
- Lai, P.C. & Liew, E.J. (2021). Towards a Cashless Society: The Effects of Perceived Convenience and Security on Gamified Mobile Payment Platform Adoption. *Australasian Journal of Information Systems*, 25, 1-25. <https://doi.org/10.3127/ajis.v25i0.2809>
- Lavuri, R., Jaiswal, D. & Thaichon, P. (2023). Extrinsic and Intrinsic Motives: Panic Buying and Impulsive Buying during a Pandemic. *International Journal of Retail & Distribution Management*, 51(2), 190-204. <https://doi.org/10.1108/IJRDM-01-2022-0010>
- Lee, Y.C. & Ho, Y.L. (2022). Effects of Gamification Incorporated in Branded Apps on Brand Responses. *International Journal of Mobile Communications*, 20(1), 53-72. <https://doi.org/10.1504/IJMC.2022.119958>
- Ming-Chi, L., (2009). Understanding the Behavioural Intention to Play Online Games. *Online Information Review*, 33(5),849. <https://doi.org/10.1108/14684520911001873>
- Lee, W. & Lu, L. (2023). Designing Gamified Interactions with Self-Service Technology at Restaurants. *International Journal of Hospitality Management*, 113,103503. <https://doi.org/10.1016/j.ijhm.2023.103503>
- Lewis, Z.H., Swartz, M.C. & Lyons, E.J. (2016). What's the Point?: A Review of Reward Systems Implemented in Gamification Interventions. *Games for Health Journal*, 5(2), 93-99. <https://doi.org/10.1089/g4h.2015.0078>
- Looyestyn, J., Kernot, J., Boshoff, K., Ryan, J., Edney, S. & Maher, C. (2017). Does Gamification Increase Engagement with Online Programs? A Systematic Review. *PLoS one*, 12(3),0173403. <https://doi.org/10.1371/journal.pone.0173403>
- Marczewski, A., (2013). Gamification: A Simple Introduction. *Andrzej Marczewski*.
- Mathwick, C., Malhotra, N. & Rigdon, E. (2001). Experiential value: Conceptualization, Measurement and Application in the Catalog and Internet Shopping Environment. *Journal of Retailing*, 77(1),39-56. [https://doi.org/10.1016/S0022-4359\(00\)00045-2](https://doi.org/10.1016/S0022-4359(00)00045-2)
- Marza, S., Idris, I. & Abror, A., (2019). The Influence of Convenience, Enjoyment, Perceived Risk, and Trust on the Attitude toward Online Shopping. In *2nd Padang international Conference on Education, Economics, Business and Accounting (PICEEBA-2 2018)* 304-313. Atlantis Press.
- McLean, G. (2018). Examining the Determinants and Outcomes of Mobile App Engagement-A Longitudinal Perspective. *Computers in Human Behavior*, 84,392-403.
- Milanesi, M., Guercini, S. & Runfola, A. (2023). Let's play! Gamification as a Marketing Tool to Deliver a Digital Luxury Experience. *Electronic Commerce Research*, 23(4),2135-2152. <https://doi.org/10.1007/s10660-021-09529-1>
- Mishra, A., Dash, S., Malhotra, N. & Cyr, D. (2015). Measuring Consumer Design Perceptions for Digital Devices: A Multi-Dimensional Scale. *Journal of Brand Management*, 22, pp.603-630. <https://doi.org/10.1057/bm.2015.30>
- KS, N., (2023). Key in Socially Driven Game Dynamics, Open the Doors of Agility-An Empirical Study on Gamification and Employee Agility. *Behaviour & Information Technology*, 42(11),1659-1685. <https://doi.org/10.1080/0144929X.2022.2093792>
- Noorbehbahani, F., Salehi, F. & Zadeh, R.J. (2019). A Systematic Mapping Study on Gamification Applied to E-Marketing. *Journal of Research in Interactive Marketing*, 13(3),392-410.
- Nour, M.M., Rouf, A.S. & Allman-Farinelli, M. (2018). Exploring Young Adult Perspectives on the Use of Gamification and Social Media in a Smartphone Platform for Improving Vegetable Intake. *Appetite*, 120,547-556. <https://doi.org/10.1016/j.appet.2017.10.016>
- Ourdas, C. & Ponis, S. (2023). Evaluating the Effects of Gamification in Behavioural Change: A Proposed SEM-based Approach. *Sustainability*, 15(6),5442. <https://doi.org/10.3390/su15065442>
- Pansari, A. & Kumar, V. (2017). Customer Engagement: The Construct, Antecedents, and Consequences. *Journal of the Academy of Marketing Science*, 45, 294-311. <https://doi.org/10.1007/s11747-016-0485-6>
- Mougouei, D. & Yeung, M.K., (2014). Visibility Requirements Engineering for Commercial Websites. *International Journal of Software Engineering and Its Applications*, 8(8),11-18.
- Pereira, M.L., de La Martinière Petroll, M., Soares, J.C., Matos, C.A.D. & Hernani-Merino, M. (2023). Impulse Buying Behaviour in Omnichannel Retail: An Approach through the Stimulus-Organism-Response theory. *International Journal of Retail & Distribution Management*, 51(1), 39-58. <https://doi.org/10.1108/IJRDM-09-2021-0394>
- Persson, J. & Berndtsson, J. (2015). Determinants of Smartphone Shopping Adoption: Key Factors for Online Shopping of Consumer Goods through Smartphones in Sweden.
- Pelling, N. (2011). The (short) Prehistory of Gamification. *Funding Startups (& other impossibilities)*, 9.
- Piligrimiene, Z., Dovaliene, A. & Virvilaite, R. (2015). Consumer Engagement in Value Co-Creation: What Kind of Value It Creates for Company? *Engineering Economics*, 26(4), 452-460. <https://doi.org/10.5755/j01.ee.26.4.12502>
- Poncin, I., Garnier, M., Mimoun, M.S.B. & Leclercq, T., (2017). Smart Technologies and Shopping Experience: Are Gamification Interfaces Effective? The case of the Smartstore. *Technological Forecasting and Social Change*, 124, 320-331. <https://doi.org/10.1016/j.techfore.2017.01.025>
- Jami Pour, M., Rafiei, K., Khani, M. & Sabirrazm, A. (2021). Gamification and Customer Experience: The Mediating Role of Brand Engagement in Online Grocery Retailing. *Nankai Business Review International*, 12(3),340-357. <https://doi.org/10.1108/NBRI-07-2020-0041>
- Praveena, K. & Thomas, S., (2014). Continuance Intention to Use Facebook: A Study of Perceived Enjoyment and TAM. *Bonfring International Journal of Industrial Engineering and Management Science*, 4(1),24.
- Raman, P. (2021). Examining the Importance of Gamification, Social Interaction and Perceived Enjoyment among Young Female Online Buyers in India. *Young Consumers*, 22(3), 387-412. <https://doi.org/10.1108/YC-05-2020-1148>
- Rialti, R., Filieri, R., Zollo, L., Bazi, S. & Ciappei, C., (2022). Assessing the Relationship between Gamified Advertising and in-app Purchases: A Consumers' Benefits-based Perspective. *International Journal of Advertising*, 41(5),868-891. <https://doi.org/10.1080/02650487.2022.2025735>



- Ruengaramrut, V. (2022). *A Quasi-Experimental Investigation of the Moderating Effects of Gamification on the Relationship between Customer Engagement and New Service Development Process Involvement*. Unpublished PhD Thesis. Bangkok University.
- Santos-Vijande, M.L., Gómez-Rico, M., Molina-Collado, A. & Davison, R.M. (2022). Building User Engagement to mhealth apps from a Learning Perspective: Relationships among Functional, Emotional and Social Drivers of User Value. *Journal of Retailing and Consumer Services*, 66,102956. <https://doi.org/10.1016/j.jretconser.2022.102956>
- Sigala, M. (2015). Gamification for Crowdsourcing Marketing Practices: Applications and Benefits in Tourism. *Advances in Crowdsourcing*,129-145. https://doi.org/10.1007/978-3-319-18341-1_11
- Simumba, J. & Nchito, W. (2018). Customer Engagement in Tourism and Hospitality Services in Kasama and Shiwa Ng'andu, Zambia. *African Journal of Hospitality, Tourism and Leisure*, 1-14.
- Shao, Z., Zhang, L., Zhang, R. & Pan, Z. (2019). Impact of Gamification on Consumers' Online Impulse Purchase: The Mediating Effect of Affect Reaction and Social Interaction.
- So, K.K.F., King, C. & Sparks, B. (2014). Customer Engagement with Tourism Brands: Scale Development and Validation. *Journal of Hospitality & Tourism Research*, 38(3),304-329. <https://doi.org/10.1177/1096348012451456>
- Spais, G., Behl, A., Jain, K., Jain, V. & Singh, G. (2022). Promotion and Branding from the Lens of Gamification in Challenging Times. *Journal of Promotion Management*, 28(4), 413-419. <https://doi.org/10.1080/10496491.2021.2008849>
- Su, C.Y. and Chiu, C.H. (2021). Perceived Enjoyment and Attractiveness Influence Taiwanese Elementary School Students' Intention to use Interactive Video Learning. *International Journal of Human-Computer Interaction*, 37(6),574-583. <https://doi.org/10.1080/10447318.2020.1841423>
- Sun, Y. & Xing, J. (2022). The Impact of Gamification Motivation on Green Consumption Behavior—An Empirical Study based on Ant Forest. *Sustainability*, 15(1), 512. <https://doi.org/10.3390/su15010512>
- Surendele, G., Murwa, V., Yun, H.K. & Kim, Y.S. (2014). The Role of Gamification in Education—a Literature Review. *Contemporary Engineering Sciences*, 7(29),1609-1616.
- Srivastava, G. & Bag, S. (2021). Diagnosing Key Factors for Gamification in Marketing using Hierarchical Clustering Technique. *International Journal of Technology Marketing*, 15(4), 354-378. <https://doi.org/10.1504/IJTMKT.2021.119074>
- Swilley, E. & Goldsmith, R.E. (2013). Black Friday and Cyber Monday: Understanding Consumer Intentions on Two Major Shopping Days. *Journal of Retailing and Consumer Services*, 20(1), 43-50. <https://doi.org/10.1016/j.jretconser.2012.10.003>
- Tsai, J. M., Hung, S. W. & Lin, G. T. (2022). Continued Usage of Smart Wearable Devices (SWDs): Cross-Level Analysis of Gamification and Network Externality. *Electronic Markets*, 1-16. <https://doi.org/10.1007/s12525-022-00575-7>
- Van Doorn, J., Lemon, K.N., Mittal, V., Nass, S., Pick, D., Pimer, P. & Verhoef, P.C. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, 13(3),253-266. <https://doi.org/10.1177/1094670510375599>
- Van der Heijden, H. (2003). Factors Influencing the Usage of Websites: The Case of a Generic Portal in The Netherlands. *Information & Management*, 40(6), 541-549. [https://doi.org/10.1016/S0378-7206\(02\)00079-4](https://doi.org/10.1016/S0378-7206(02)00079-4)
- Van Heerden, C. H. (2017). Atmospherics, Servicescape and Attractiveness of a Macro Holiday Resort.
- Venkatesh, V., Thong, J.Y. & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*,157-178. <https://doi.org/10.2307/41410412>
- Vashisht, D. & Royne, M.B. (2019). What We Know and Need to Know About the Gamification of Advertising: A Review and Synthesis of the Advergame Studies. *European Journal of Marketing*, 53(4),607-634. <https://doi.org/10.1108/EJM-01-2017-0070>
- Wu, X. & Santana, S. (2022). Impact of Intrinsic and Extrinsic Gaming Elements on Online Purchase Intention. *Frontiers in Psychology*, 13,885619. <https://doi.org/10.3389/fpsyg.2022.885619>
- Yang, Y., Asaad, Y. & Dwivedi, Y. (2017). Examining the Impact of Gamification on Intention of Engagement and Brand Attitude in the Marketing Context. *Computers in Human Behavior*, 73, 459-469. <https://doi.org/10.1016/j.chb.2017.03.066>
- Yu, N. & Huang, Y.T. (2022). Why do People Play Games on Mobile Commerce Platforms? An Empirical Study on the Influence of Gamification on Purchase Intention. *Computers in Human Behavior*, 126, 106991. <https://doi.org/10.1016/j.chb.2021.106991>
- Van der Heijden, H., (2003). Factors Influencing the Usage of Websites: The Case of a Generic Portal in The Netherlands. *Information & Management*, 40(6),541-549. [https://doi.org/10.1016/S0378-7206\(02\)00079-4](https://doi.org/10.1016/S0378-7206(02)00079-4)
- Xiao, R., Wu, Z. & Hamari, J. (2022). Internet-of-Gamification: A Review of Literature on IoT-Enabled Gamification for User Engagement. *International Journal of Human-Computer Interaction*, 38(12),1113-1137. <https://doi.org/10.1080/10447318.2021.1990517>
- Zhang, L., Shao, Z., Li, X. & Feng, Y. (2021). Gamification and Online Impulse Buying: The Moderating Effect of Gender and Age. *International Journal of Information Management*, 61,102267. <https://doi.org/10.1016/j.ijinfomgt.2020.102267>
- Zhang, Q. & Ahmad, W. (2023). Online Impulse Purchase in Social Commerce: Roles of Social Capital and Information Overload. *International Journal of Human-Computer Interaction*,1-18. <https://doi.org/10.1080/10447318.2023.2212862>
- Zhou, F., Lin, Y., Mou, J., Cohen, J. & Chen, S. (2023). Understanding the Dark Side of Gamified Interactions on Short-form Video Platforms: Through a Lens of Expectations Violations Theory. *Technological Forecasting and Social Change*, 186,122150. <https://doi.org/10.1016/j.techfore.2022.122150><https://www.mckinsey.com/business-functions/growth-marketing-and-sales/our-insights/survey-indian-consumer-sentiment-during-the-coronavirus-crisis> [Retrieved on 10 January 2024]