Do Females Intend to Use Gamified Virtual Currency in E-Tailing? An Empirical Study

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ABSTRACT

The current study serves two purposes. First and foremost, this research aims to determine the impact of a game mechanism known as virtual currency on the intention of young female consumers to use it in an e-tailing platform; second, it looks at the function of e-trust and task awareness as an extension to the TAM framework, two antecedents that are thought to influence female virtual currency adoption intentions in e-tailing. The proposed framework was evaluated using data from an online survey of 386 female participants across India. The conceptual framework is empirically validated using the PLS-SEM technique. The current study broadens the scope of game mechanics by emphasizing the importance of e-trust as an independent variable and task awareness as a mediator. Findings imply that the e-tailer's may include virtual currency into their platforms, allowing female consumers to make substantial use of it in their purchasing decisions.

KEYWORDS

E-Commerce, E-Trust, Gamification, Shopping, SuperCoins, Task Awareness, Technology Acceptance Model (TAM), Virtual Currency

INTRODUCTION

India's booming and fast-growing young population are second only to China in being one of the world's heaviest consumers of internet services. It is estimated that by 2025 India would have 900 million active internet users (ETtech, 2021). Similarly, e-tailing is rising in popularity in India and has a big potential for growth in the worldwide market (Dorai et al., 2021). The process through which online retail firms sell things by taking orders online and fulfilling them both online and offline is

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known as e-tailing (Kim et al., 2009). In India, female internet users accounted for 48 percent of active internet users, while only 28 percent of the total users account for those who shop online regularly (Bhattacharjee, 2021). This implies that there are still a large number of active female internet users that are yet to regularly engage in e-tailing. This could be due to factors like trust, task awareness, perceptions of usefulness, and ease of the shopping experience on e-tailing platforms (Raman, 2014). Women place the most importance on the dimension of e-trust and task awareness when it comes to e-tailing platforms (Sebastianelli et al., 2008). To better engage online shoppers, e-tailing platforms seek to come up with unique ways to build user trust and dependability towards the platform, but only a few studies explain the role of e-trust in e-tailing (Das, 2016).

Gamification has well-specified as the application of game mechanics to non-game situations (Deterding et al., 2011). The purpose of gamification is to provide the target individuals or groups with specific motivational affordances to achieve specific behavioral outcomes (Jung et al., 2010; Weiser et al., 2015; Zhang, 2008). Nearly 70% of worldwide organizations planned to embrace gamification for promotion and customer engagement in the near future (Fitz-Walter, 2013). In the context of technology-enabled services, the use of game mechanics is viewed as a tool by service providers to make the service more engaging for the users (Hamari & Koivisto, 2015). By implementing game mechanics into information systems, designers of such systems seek to build trust, thereby resulting in certain behavioral and usage intentions regarding the platform (Hunicke et al., 2004). Game mechanics such as points and leaderboards have been commonly used in gamified applications and contexts (Deterding & Walz, 2014), but depending only on those game mechanics might not be enough to render gamification effectiveness (Chorney, 2012). However, with respect to virtual currency as a game mechanic (Aziz et al., 2017), there is a dearth of studies that look into the effectiveness of the applications of virtual currency as a game mechanic in various contexts.

Virtual currency is a type of digital currency but may indeed not have all of the characteristics of actual money (Dibrova, 2016). Virtual currency in the gamification context is the non-standard virtual money utilized while enjoying the game and the money point system with some economic value. Despite concerns about legitimacy and viability, the proportion of people using virtual currencies increases globally (Shin, 2008). According to the latest estimates, India is estimated to contribute roughly ten percent of the global virtual currency market. One of India's widely used e-tailing web applications for online shopping is Flipkart (Dorai et al., 2021) that has got virtual currency. Members of Flipkart platforms can gain achievements due to activities and virtual currency by completing specific tasks like purchasing (Aydin, 2015). The literature also points to the need for focused empirical studies with regards to specific game mechanics and their influence in creating behavioral and engagement outcomes among intended user groups (Xi & Hamari, 2020).

In the context of virtual currency, the dearth of studies with regards to their use and effectiveness (García-Jurado et al., 2019), coupled with the need to find ways to tap into the dormant female internet user base with regards to e-tailing platforms, has formed the basis for this study. The usage of virtual currency characterized by a group of procedures and specific behaviors is looked into by this study to gauge its influence on usage intentions of female users with respect to the virtual currency afforded in the context of an e-tailing setting like the Flipkart platform. By leveraging the versatility of the Technology Acceptance Model in being able to predict the acceptance of new technologies and applications like gamification in the context of online shopping (Raman, 2020; Samar & Mazuri, 2019), the study has incorporated e-trust as an independent variable and task awareness as a mediating variable to foresee the intention to use virtual currency among female users. From a practical perspective, the study seeks to find insights for designers of gamified e-tailing platforms with regards to the factors that influence young female consumers' willingness to use virtual currency in an e-tailing context in a developing country like India. On the theoretical front, the study seeks to add value to the foundations of the TAM by incorporating e-tailing context-relevant factors like e-trust and task awareness. Based on these objectives, the study set out to answer the following research questions:

- What are the factors that influence young female consumers into adopting virtual currency in an e-tailing context?
- How does a game mechanic like virtual currency affect usage behaviors among young female internet users in India?
- How can the TAM be integrated with the literature on e-trust and task awareness to predict consumer behavior regarding a game mechanic in an e-tailing context?

LITERATURE REVIEW

SuperCoins – Virtual Currency By Flipkart

As per a study conducted collaboratively by the ICEA and consulting company KPMG, rural India saw a 35 percent increase in internet subscribers year over year in 2018, compared to a 7 percent increase in urban India during the same timeframe (Bureau, 2020). E-retailer like Flipkart is leading the charge in converting offline customers into online value seekers (Malik, 2014). With the advent of global behemoths such as Amazon.com in 2013, Indian players such as Flipkart are searching for innovative ways to reward customers in order to stay ahead of the competition. Flipkart has several consumer engagement strategies, including many gamification activities, to retain this rapid rush of clients even during the pandemic (Ota et al., 2020). Flipkart uses a gamified consumer engagement strategy called virtual currency called SuperCoins (Moin & Rahman, 2019) that is both marketable and redeemable, which means that the SuperCoins can be used to purchase a variety of physical goods. Flipkart began as a zero-subscription loyalty incentive program called Flipkart Plus for all of its consumers. Plus membership rewards 4 SuperCoins for every 100 rupees paid on a Flipkart purchase, while non-plus members collect 2 SuperCoins (Flipkart, 2019). Whatsoever some questions remain in both academicians and business people how far the virtual currency is affecting real-life scenarios (Wang & Mainwaring, 2008). Therefore this research focuses on deciphering consumer behavior in a gamified virtual currency context and analyzing it with the help of essential data to enhance the e-tailer's stickiness.

TAM for Intention to Use

The TAM is a popular acceptance framework for researching online customer behavior, particularly in e-tailing (Aydin, 2015). TAM is based on the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), which is used to predict how technology will be accepted. The two basic assumptions of the TAM have perceived usefulness and perceived ease of use (Davis, 1989) which are being used to measure individuals' intentions to use technological innovations and their actual use of technological developments (Viswanath, Venkatesh & Fred D., Davis, 2000). The TAM has been widely used to investigate people's intention to use behavior across various populations and forms of technological advances (Chiu & Cho, 2021; Marangunić & Granić, 2015). However, according to the latest studies on the TAM, the mediating variable attitude may or may not have an impact on a person's intention to use technology, and it is still a point of disagreement among researchers (López-Bonilla & López-Bonilla, 2017), so we did not include it in our research. Based on the extensive literature review on the adoption of virtual currency, this study has added task awareness as a mediating component and e-trust as an independent variable as an extension to TAM. Whatsoever the validity of the TAM model used in this research is also confirmed through the hypotheses framed.

Perceived Usefulness

The variable perceived usefulness is specified as the extent to which a person believes that implementing a particular system will enhance their ability to do the job (Davis et al., 1989). The term relates to whether or not a piece of technology is considered useful for the mission at hand. Flipkart offers unique discounts on things purchased with virtual money, which is a form of usefulness for

its customers (Moin & Rahman, 2019) but to what extent is something that needs to be measured in this study. The ongoing interpretation of perceived usefulness frames the hypothesis in this study. The perceived usefulness of a system is a significant element in its dissemination. In this gamified context of the study, perceived usefulness is specified as a user's belief in the transaction using the virtual currency and its positive intention to use SuperCoins.

H1: Perceived usefulness has a positive influence on the intention to use the virtual currency

Perceived Ease Of Use

Perceived ease of use is defined as the extent to which someone believes that using a particular technology will be comfortable (Davis, 1989). The term ease can also be defined as a state of being free of strain or having a lot of energy. The precise definition of perceived ease of use was used to frame the hypothesis in this study. The previous studies found the existence of a direct link between perceived ease of use and intention to use (R. Hendrickson & R. Collins, 1996). Empirical research using the TAM has shown that perceived ease of use has a significant positive effect on perceived usefulness and intention to use. The usage of virtual currency in the gamification situation is still considered an innovation, especially in the Indian e-tail setting. The variable perceived ease of use aids the initial acceptance of an invention, which is critical for favorable reception and persistent use (Davis et al., 1989). This study takes into account all of these factors.

- **H2:** Perceived ease of use has a positive influence on perceived usefulness toward using the virtual currency
- H3: Perceived ease of use has a positive influence on the intention to use the virtual currency

Task Awareness

Virtual currency is a new game mechanic in the Indian e-tailing setting; knowing how to use it is a great concern, particularly for customers who intend to use it. The aspects of gamification, as well as the related concept, are sometimes not yet evident to the users, resulting in failure to adopt the technology (Shahri et al., 2019). In this context, customers' perceptions and understanding of how to use the gamified virtual currency called SuperCoins is crucial for its intention to use. This notion a person has about what he or she is supposed to do dependent on directions or by using technical tools is known as task awareness (Goel et al., 2011), and this could also comprise information about interactions, procedures, tasks, instruments, or artifacts (Gijlers et al., 2013). Lack of such kind of awareness could have an impact on users' decisions (Menon & Raghubir, 2003) like intention to use technology. As per the review of existing literature, the variable task awareness was overlooked in the gamification context, and in this study, it is used as a mediator because it could describe the relationship between the research's independent and dependent variables. This study tries to build insight by testing the following hypothesis

H4: Task awareness has a positive influence on the intention to use the virtual currency

E-trust

E-trust develops in situations where there are no personal or physical connections, and exchanges are transmitted by technological means (Ba et al., 2003; Taddeo, 2009). Previous research has shown the importance of e-trust in e-tailing acceptance (Ben Mansour, 2016), and the users are more inclined to accept new technologies when they have e-trust (Candra et al., 2020). The prosperity of today's web applications can largely be due to their ability to gain user trust (Olaleye et al., 2018). The function of trust in the context of virtual currency transactions has become crucial as users' vulnerability

in e-tailing platforms has grown (Shin, 2008). The lack of trust will lead to the failure to adopt new technologies like virtual currency among the users in online business (Ben Mansour, 2016). Various persistent elements influence the development of trust, including both pre-interactional and interactional aspects, which consist of service and technological attributes (Colesca, 2009). Therefore this study investigates the role of e-trust towards virtual currency usage intention as an extended independent variable for the TAM, which has been ignored in the previous studies. The following hypotheses are framed incorporating all those factors

H5: E-trust has a positive influence on perceived usefulness toward using the virtual currencyH6: E-trust has a positive influence on perceived ease of use toward using the virtual currencyH7: E-trust has a positive influence on task awareness on using the virtual currency

METHODOLOGY

Sampling Procedure And Data Collection

The primary purpose of this study is to extend the TAM model (Figure 1) to better understand young females' intention to use virtual currency in an e-tailing platform called Flipkart. For this study, an internet-based survey questionnaire has been used and conducted from October 2020 to April 2021. The researchers utilized a combination of judgmental and snowball sampling techniques in their research. A group of individuals was determined in the first stage via judgmental sampling. Further participant lists were obtained from the first group of people in the next round. Although we received responses from 410 people, due to missing and extreme data in the survey, 24 samples were removed from this study. Therefore we only filtered and took responses from N=386 females who

Figure 1. The proposed research framework for testing



were relevant to the investigation. Sometimes still, the integration of virtual currencies in e-tailing service providers in India is uncommon. As a result, it was critical to ensure that the respondents had a sufficient comprehension of the virtual currency. As a result, we checked each response to see if female consumers were conscious of this mode of communication. Only female respondents between the ages of 18 and 30 who are aware of SuperCoins and have shopped at least once on gamified online shopping platform called flipkart.in were considered necessary to use the sampling technique. The sample included participants with various socio-demographic characteristics based on profession, income, and other factors. As per the data, Flipkart was used by 67 percent of the respondents for more than three years. The representativeness of the samples are declared in table 1

Measurement

The information was gathered through a web-based questionnaire survey. The data collection instrument was created based on the review of relevant pieces of literature and was used to measure each construct. The research instrument consisted of 16 items that essentially represented five separate variables as described in the study model. The survey used a 7-point Likert scale with

Demography	%			
Gender				
Female	100			
Age				
18-30	100			
Employment status				
Student	29.02			
Self-employed	25.39			
Professional	29.53			
Others	16.06			
Flipkart Usage				
1–6 months	5.96			
7 months–1 year	3.63			
1–2 years	7.51			
2-3 years	15.54			
More than 3 years	67.36			
Marital status				
Single	50.7			
Married	47.23			
Others	2.07			
Region				
North India	26.42			
South India	23.58			
East India	24.61			
West India	25.39			

Table 1. Descriptive statistics of the sample

responses ranging from "strongly disagree" to "strongly agree," all of which were taken from earlier validated instruments. Whatsoever prior to moving on with actual data gathering, a pilot study was done using an online questionnaire survey consisting of 122 female participants who are the users of Flipkart SuperCoins to evaluate whether the items in the questionnaire are reliable in order to ensure questionnaires dependability. Statistical Package for the Social Sciences was used initially to do a reliability test upon on data first from pilot research. The variable perceived usefulness was finally assessed through three items taken from (Davis, 1989), and perceived ease of use was finally assessed with three items scale taken from (Venkatesh, 2000). Task awareness was finally measured by using three items scale taken from (Jin et al., 2011). Three items scale was used to measure the variable e-trust, which is taken from (Jin et al., 2008). The intention to use was the dependent variable that the researcher used, and it was measured by using four items scale adopted from (Davis, 1989).

Data Analysis

This study applied the partial least square (PLS) method, a frequently employed variance-based SEM technique, with the SmartPLS 3 software (Ringle et al., 2015). There are more than a few reasons for using the PLS regression method. Because of its propensity towards predictive analysis, PLS was decided to be used in this study. The previous studies had already claimed that PLS is beneficial for very multifaceted predictive models with comparatively smaller sample sizes (Reinartz et al., 2009), and for this study, the sample size (N) was 386, which matches the relatively small size. Initially, every single item's reliability was examined by inspecting the indicator loadings. Only the items that satisfied the condition that the values above the set standard of 0.70 (Hair Jr et al., 2021) were considered for the study and those item indicator loadings are revealed in table 2.

Latent Variable/	Items	Indicator
Scale Kelerence		Loadings
Intention to use	ITUS1: In the future, I hope to transact with SuperCoins	
(Davis, 1969)	ITUS2: As much as possible, I want to use SuperCoins	
	ITUS3: I recommend that others use SuperCoins	0.938
	ITUS4: In the forthcoming, I want to endure using SuperCoins	0.939
Perceived ease	PEUS1: SuperCoins tend to be very useful in my Flipkart transactions	0.883
of use (Venkatesh, 2000)	PEUS2: I believe SuperCoins will help me improve my Flipkart transactions	0.861
	PEUS3: In my view, SuperCoins would help to increase the quality of Flipkart transactions	0.837
Perceived	PUSN1: I have realized that using SuperCoins to be straightforward and understandable	0.929
usefulness (Davis, 1989)	PUSN2: I have realized that using SuperCoins does not necessitate a great deal of psychological exertion	0.903
	PUSN3: I have realized that using SuperCoins to be easy to use	0.952
Task awareness (Goel et al., 2011)	TAWR1: In the Flipkart application, the textual and visual clues about SuperCoins in the platform helped me to do the task	0.913
	TAWR2: In the Flipkart application, there were clues in the platform about SuperCoins that made completing the task easy	0.963
	TAWR3: In the Flipkart platform, the information given in the app about SuperCoins helped me understand or explain to others the task better	0.945
E-trust	e-TRS1: I trust what this Flipkart application says about the SuperCoins	0.860
(Jin et al., 2008)	e-TRS2: I trust the claims and promises this Flipkart application makes about SuperCoins	0.903
	e-TRS3: This Flipkart application's SuperCoins is reliable	0.845

Table 2. Latent variable, items, and indicator loadings

After excluding the items which exhibited low reliability, each construct's outcomes like Cronbach's alpha, rho_A, composite reliability, and average variance extracted and details are mentioned in table 3. The quality of being dependent on the survey questionnaire was checked by calculating Cronbach's α , composite reliability to establish internal consistency. Both the composite reliability and Cronbach's alpha are analyzed in almost a similar way (Wee & Choong, 2019), which looks at the indicators' internal consistency reliability, and the values between 0.70 and 0.90 can be considered satisfactory in terms of reliability (Nunnally & Bernstein, 1994). The latent variables composite reliability and Cronbach's alpha values are within the set standard. Every latent variable had an AVE greater than 0.50 (Hulland, 1999) and hence confirmed the convergent validity.

This study used the heterotrait-monotrait ratio of the correlations (HTMT) method (Voorhees et al., 2016) to evaluate the construct's discriminant validity. The HTMT criterion does not exceed the most restrictive threshold of 0.85 in order to achieve discriminant validity (Henseler et al., 2015). Table 4 shows the conclusions of the measurement HTMT criterion outcomes after the erasure of items TAWR4, PUSN4, PUSN5, PUSN6 because of low factor loading which was below 0.40 (Hair et al., 2011). Every latent variable in this research is measured by using a minimum of 3 items that are good enough to have internal consistency(Cook et al., 1981).

RESULTS

The bootstrapping approach was used in this study to estimate the route significance of the structural model using 2000 sub-samples in order to test the hypotheses given in the previous section. The route significance was calculated using the results of the bootstrapping procedure (t-value). Figure 2 indicates the tested structural framework of intention to use the virtual currency. The Variance Inflation Factor (VIF) evaluates the structural model as a collinearity issue, and the value should be greater than 0.20 but less than 5 (Hair et al., 2011). The VIF values for each construct in the structural framework of the study are presented in table 5. The analysis reveals that the theoretical framework has no collinearity problems.

Constructs	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Perceived usefulness	0.920	0.922	0.949	0.862
Perceived ease of use	0.825	0.828	0.896	0.741
Task Awareness	0.935	0.935	0.958	0.885
e-Trust	0.839	0.845	0.903	0.756
Intention to use	0.952	0.953	0.965	0.874

Table 3. Reliability and validity analysis

Table 4. Heterotrait-Monotrait Ratio (HTMT)

Constructs	Perceived usefulness	Perceived ease of use	Task Awareness	e-Trust	Intention to use
Perceived usefulness					
Perceived ease of use	0.743				
Task Awareness	0.795	0.729			
e-Trust	0.833	0.728	0.748		
Intention to use	0.834	0.783	0.818	0.737	

Constructs	Perceived usefulness	Perceived ease of use	Task Awareness	e-Trust	Intention to use
Perceived usefulness					2.494
Perceived ease of use	1.584				1.928
Task Awareness					2.449
e-Trust	1.584	1.000	1.000		
Intention to use					

Table 5. Collinearity assessment for the structural model (VIF values)

Figure 2. The tested structural framework of intention to use virtual currency



The specific indirect effects are calculated, which reveals a positive mediation effect on all paths at a 5% significance level, and the details are provided in table 6. The overview of path outcomes and the accompanying t-values demonstrating that all pathways are significant at a 5% level and are mentioned in table 7. Perceived usefulness has a significant positive effect on the intention to use virtual currency ($\beta = 0.377$ and t-value = 6.943) at p<0.001, which indicated that hypothesis 1 is supported. Perceived ease of use has a significant positive effect on perceived usefulness and intention to use virtual currency ($\beta = 0.325$ and t-value = 6.436, $\beta = 0.226$ and t-value = 4.602) at p<0.001 indicated that hypothesis 2 and hypothesis 3 are supported. Task awareness has a significant positive effect on the intention to use virtual currency ($\beta = 0.349$ and t-value = 5.967) at p<0.001, which indicated that hypothesis 4 is supported. Furthermore e-trust has found to be excellent predictor of perceived usefulness ($\beta = 0.537$ and t-value = 11.028), perceived ease of use ($\beta = 0.607$ and t-value = 18.580) and task awareness ($\beta = 0.663$ and t-value = 20.800) at p<0.001, which indicated

that hypothesis 5, hypothesis 6 and hypothesis 7 are supported. All of the proposed hypotheses are confirmed, as previously mentioned.

Table 8 shows the coefficient of determination and predictive relevance for the structural model's endogenous variables (which are identified as latent variables). In order to estimate cross-validity redundancy as a measure of Q^2 , a blindfolding technique with an omission distance of seven was used. The coefficient of determination for all latent variables in this study was high and is shown by the adjusted R^2 values. The theoretical path model could account for 72% of the variance for intention to use virtual currency. Additionally, the model's predictive relevance for all variables is shown by the Q^2 values. As per (Chin, 1998), a Q^2 value greater than zero suggests the model's predictive significance for that specific latent variable.

Table 6. Results of mediation effect

Mediating Path	t-statistics (IO/STDEVI)
Perceived ease of use -> Perceived usefulness -> Intention to use	5.198
E-trust -> Perceived ease of use -> Perceived usefulness -> Intention to use	5.059
E-trust -> Task awareness -> Intention to use	5.968
E-trust -> Perceived ease of use -> Perceived usefulness	5.941
E-trust -> Perceived usefulness -> Intention to use	5.468
E-trust -> Perceived ease of use -> Intention to use	4.549

Note: All paths are at p<0.001

Table 7. Results of hypothesis testing for theoretical model path coefficient

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-statistics (O/STDEV)	Support Hypothesis
Perceived usefulness -> Intention to use	0.377	0.377	0.054	6.943	Yes
Perceived ease of use -> Perceived usefulness	0.325	0.326	0.050	6.436	Yes
Perceived ease of use -> Intention to use	0.226	0.228	0.049	4.602	Yes
Task awareness -> Intention to use	0.349	0.348	0.059	5.967	Yes
e-Trust -> Perceived usefulness	0.537	0.536	0.049	11.028	Yes
e-Trust -> Perceived ease of use	0.607	0.608	0.033	18.580	Yes
e-Trust -> Task awareness	0.663	0.663	0.032	20.800	Yes

Note: All paths are at p<0.001

Table 8. The coefficient of determination and predictive relevance of latent variables

Latent variables	Adjusted R ²	Q ²
Perceived usefulness	0.604	0.518
Perceived ease of use	0.367	0.271
Task Awareness	0.438	0.385
Intention to use	0.720	0.624

DISCUSSIONS AND CONCLUSION

Theoretical Implications

This paper's major contribution was to establish a conceptual framework for young female e-tailing users that focuses on using gamified virtual currency and provides noteworthy findings that validate previous research. The study employed an extended TAM to uncover the key roles of e-trust and task awareness in a gamified e-tailing scenario. According to the findings, e-trust, which focus on reliability and promises claimed about SuperCoins, has a beneficial impact on female consumers' task awareness, and also with original variables of TAM such as perceived usefulness, perceived ease of use when it comes to using a virtual currency which is in line with previous researches (Ben Mansour, 2016; Rahman et al., 2013; Salloum & Al-Emran, 2018). According to the results of this study, e-trust had the greatest impact on task awareness, followed by perceived ease of use and perceived usefulness. The significant impact of perceived ease of use on perceived usefulness and intention towards using the SuperCoins was discovered, which is similar to the original TAM's statement that perceived ease of use is a preceding factor determining individuals' perceptions of virtual currency's usefulness and a good predictor of intention to use virtual currency (Ha & Stoel, 2009; Hassanein & Head, 2007; Van der Heijden, 2003). This study's findings also support the importance of extended mediating variables such as task awareness and TAM variables such as perceived ease of use and perceived usefulness (García-Jurado et al., 2019; Raman, 2020), which is consistent with previous research. The entire study emphasizes the crucial function of e-trust in initiating the mechanism and mediation effect of task awareness in using virtual currency and perceived ease of use and perceived usefulness toward adopting virtual currency in influencing young females' intentions to use SuperCoins. After deducing the results, this study adds to the previous literature on the gamified virtual currency by extending the TAM model to include variables like e-trust and task awareness. The findings show that the model is still valid when it comes to the adoption of game mechanics in e-tailing.

Managerial Implications

The improved theoretical framework reveals several significant elements that can assist online merchants in developing gamified tactics to increase young females' consumer involvement and, as a result, increase revenue. Flipkart celebrates online purchasing with promotions such as Flipkart Fashion Days, Flipkart Freedom Sale, Super Saver Days, Big Savings Days, and so on. However, critical variables like task awareness that provides information about utilizing SuperCoins may work as a stimulant for purchase intention behavior. As e-trust has a significant impact on virtual currency usage intention, in addition to price discounts and special coupons for female consumers, they may consider building trust in SuperCoins to help instill favorable online buying intentions in this demographic.

Gamification has a favorable impact on the usage intention of young female consumers in India, where e-tailing is becoming increasingly competitive. The most crucial finding for online stores and businesses is that the gamification mechanism known as virtual currency is extremely applicable to online shopping platforms. Therefore, the companies with young females as their target customers should design their online shopping websites to integrate a gamification mechanism known as a virtual currency to help them have a better buying experience. Another most essential practical implication based on the insights from this study is that for the e-tailers, for their business to improve, the website should appeal to young female customers by adding content on gamification elements.

There are previous researches showing various cons of game mechanics (Diefenbach & Müssig, 2019). Therefore, adopting the various mechanics of gamification carelessly without knowing the context and requirement can lead to greater problems and ineffectiveness in running the business, which is a significant concern for organizations implementing gamification. As a result, caution should be exercised while creating a website containing gamification components, and the issue is formerly acknowledged (Hamari, 2013).

Limitations

There are certain flaws in the current investigation that scholars can explore in future research. First, this research castoff only a single game mechanic called virtual currency. The phrase "gamified virtual currency" is not very broad because different virtual currencies have different qualities; the research results on SuperCoins cannot be generalized. The current study used an online questionnaire survey to obtain data from target respondents in India, and this may also limit the scope of generalization. The study used judgmental and snowball sampling methods; therefore researcher's bias and control can be another limitation. In this examination, the PLS-SEM was chosen as the most appropriate tool for statistical analysis; however, research on the same subject with a large enough sample size and different approaches could provide different results. Lastly, the desire to use virtual currency may differ depending on the platform used, such as mobile commerce versus computer-mediated commerce. This distinction is not captured in this research.

FUTURE STUDIES AND RECOMMENDATIONS

This work will provide more research opportunities by extending the TAM to include more relevant variables to understand virtual currency adoption better. More studies can look at the virtual currency's purpose to use from both a quantitative and qualitative standpoint. Since this study is only limited to India, it is proposed that this study be conducted in a larger number of developing countries or that a proportional examination be conducted between two countries with opposing ideas. Furthermore, future studies may look at things across time rather than simply at one point in time; hence, a longitudinal study may yield more comprehensive data. A multi-group study based on a social demographic function is also recommended for further investigation. Future research may include young males or a comparison of male and female online shoppers who are avid virtual currency users.

CONCLUSION

The study addressed a gap in the literature by looking at the effects of individual game mechanics on female internet users in an e-tailing context. This study sought to contribute to the theory by extending the theoretical premises of TAM with an independent variable called e-trust and a mediating variable called task awareness. This is highly relevant for the study in underlining the impact on the usage intention of virtual currency with reference to an e-tailing setting among female internet users. When it comes to the factors influencing the adoption of a game mechanic like virtual currency, the research confirms a significant positive relationship among e-trust, task awareness, perceived ease of use, perceived usefulness, and the intention to use the gamified virtual currency among female consumers. Future researchers will be able to build on the outcomes of this study with the knowledge gained from these structural relationships.

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