DOI:10.58665/NJISS

Original Research Article

Continuance Adoption of Online Stock Trading Among Investors of Kathmandu Valley

Laxman Pokhrel[1], Sunita Sapkota[2]

[1] Research Coordinator, SAIM College
[2] MBA Graduate, SAIM College

Article History

Received on - January 4, 2023
Revised on - February 8, 2024
Accepted on - February 26, 2024

Keywords:

Continuance behavior, continuance intention, habit, perceived usefulness, satisfaction

Online Access

DOI: https://doi.org/10.58665/njiss.35

Correspondence

Laxman Pokhrel,
Research Coordinator, SAIM College
Email: laxman.pokhrel@saim.edu.np

How to Cite APA Style

Pokhrel, L. and Sapkota, S. (2024). Continuance Adoption of Online Stock Trading Among Investors of Kathmandu Valley. *Nepalese Journal of Insurance and Social Security.* 6(1),12-20.

Abstract

Purpose: This paper investigates the continuance adoption of online stock trading among investors in Kathmandu Valley.

Methodology: Using self-administered questionnaires, this paper applied a purposive sampling technique to collect data from 271 stock investors in the Kathmandu Valley. Structural Equation Modeling (SEM) was used to estimate proposed model.

Findings and Conclusions: This paper found that satisfaction, habit, and dis-confirmation have significant positive influence on the adoption of online stock trading among investors in the Kathmandu Valley. However, perceived usefulness, subjective norms, and continuance intention do not appear to have any significant influence on the adoption of online stock trading among investors in the Kathmandu Valley. The result implies that 70% of variance of continuance behavior is explained by the existing model.

Implications: This paper has theoretical and managerial implications. Theoretically, this paper studies continuance adoption of online stock trading in Nepali context and found investors in Nepal continue adopt online stock trading if they perceive it to be easy, satisfying, useful, and habitual investors continue adopting online stock trading. Managerially, this paper could provide empirical evidence to design promotional strategies of online stock trading for SEBON (Securities Board of Nepal) to increase awareness level among online stock investors.

1. Introduction

Over the last two decades, the digital revolution has had a massive and lasting impact on the world's economy. Before the digitization of economic activities such as stock trading, traders had to phone their brokerage companies to place buy and sell orders. With the change in economic operation, financial products and services have not only been accessible to customers but also removed geographical barriers to stock trading, reducing brokerage services and increasing investors in the market (Singh & Malhotra, 2016). Even though online stock trading activities have been successfully modernized by technology (Shankar et al., 2002), online stock trading behaviors are not widely used and have not been the subject of investigation. Therefore, this paper deemed it reasonable to investigate online stock trading behaviors.

Online stock trading refers to the trading of financial products, particularly stocks, over the Internet, and an online stock trading site is a site that enables clients or traders to buy and sell financial products (Devkota et al., 2021). Online stock trading has many advantages, including high liquidity of financial assets, low transaction fees, faster transactions, and more transparent information, whereas indirect benefits include checking stock quotes, receiving real-time market news, and performing transactions from anywhere and at any time (Lee-Partridge & Ho, 2003). Despite the benefits of online stock investing over offline stock investing, investors seem not switching to online stock investing. Even online investors are switching from online to offline stock investment. Thus, investing in the continuance behavior of online stocking trading would be reasonable.

To understand online stock trading behaviors, this paper applied the unified expectation confirmation model (UECM) to explain the continuance behavior of online stock investing because this model is appropriate for investing post-usage behaviors of technology(Pokhrel & K.C., 2023). The UECM stated that continuance behavior is explained by different variables such as continuance intention, satisfaction, habit, perceived usefulness, and confirmation of services. The continuance behavior refers to a user's continuance use of an IT over a long period (Bhattacharjee, 2001). In the context of stock investing, it refers to online stock investors' pattern of behavior associated with continuance use of online stock trading. This model states that continuance behavior is the outcome of continuance intention, satisfaction, and habit of using online stock trading. Likewise, continuance intention is influenced by satisfaction, perceived usefulness, and subjective norms. Disconfirmation indirectly influences continuance intention through perceived usefulness and customer satisfaction (Bhattacherjee & Lin, 2015). However, there is a dearth of literature on the continuance behavior of online stock investing. Therefore, this is reasonable to investigate the continuance behaviors of online stock investing by applying

After reviewing the literature on continuance behaviors, this paper identified the following research gaps. First, to the best of researchers' knowledge, the unified expectation confirmation model has not been applied in the context of online stock investing (e.g., Devkota et al., 2021; Khan et al., 2018; Pokhrel, 2022). By bridging this gap, this paper has contributed to increasing the generalizability of the model. Second, the majority of Nepali studies have ignored post-adoption behaviors of technology acceptance (e.g., Devkota et al., 2021; Pokhrel, 2022). By studying the post-adoption behavior of online stock investment, this paper has unraveled the factors influencing online stock investment among investors of Kathmandu Valley. Finally, there is a policy gap for Nepal Rastra Bank and the Security Board of Nepal to facilitate evidence-based policymaking in the domain of online stock investment. For the above-stated research gaps and rationales, this paper proposes to investigate the factors influencing the continuance of online stock trading among investors in the Kathmandu Valley.

2. Review of Literatures

Continuance Intention and Continuance Behavior: Continuance intention is defined as the intention of users to continue using the information system (Bhattacherjee 2001a). It refers to the intention to continue using the NEPSE online trading system. Previous studies found that continuance intention has a significant influence on continuance behavior in the context of IT usage (e.g., Bhattacherjee, 2000; Bhattacherjee, 2001b; Bhattacherjee, & Lin, 2015; Obal, 2017). This implies that users may continue to use IT if they intend to continue to use the Information System (IS). In this paper, the authors have assumed that if online traders intend to use the NEPSE online trading system in the future, investors tend to continue using online stock trading apps.

Perceived Usefulness and Continuance Intention: A person's perceived usefulness is measured by how much their job performance would improve by employing a system (Davis et al., 1989). It refers to the perception of job performance done by the NEPSE online trading system. In the context of IT use, perceived usefulness has been found to influence continuance intentions (e.g., Bhattacherjee, 2000; Bhattacherjee, 2001a; Bhattacherjee, & Lin, 2015; Obal, 2017). Based on the results, it is evident that IS would be useful and used for a long time. Perceived usefulness is a measure of how much an individual perceives online stock trading as offering additional advantages over earlier methods of conducting stock trading transactions (Ramayah et al., 2009). The paper assumed that perceptions of online stock trading's usefulness lead to continuation intention.

Satisfaction and Continuance Behavior: Satisfaction refers to how satisfied an individual is with a service after having direct use experiences with it. Users' satisfaction refers to their feelings about previous IS usage (Bhattacherjee, 2001). It refers to meeting the expectation of service quality of the NEPLSE online system after using the service. The authors argue that satisfaction helps IT continuance behavior through users' continuance intention (De Guinea & Markus, 2009). Users' intention to continue using IS is mostly determined by their satisfaction with prior IS use (Bhattacherjee, 2001b). In previous studies, it is reported that satisfaction has significant influences on the continuance behaviors of IT (e.g., Bhattacherjee, 2000; Bhattacherjee, 2001a; Bhattacherjee & Lin, 2015; Tsai et al., 2014). Most researchers agree that improved information management leads to satisfied investors (Rashid, 2009). In the context of online stock trading, traders tend to keep using the NEPSE online trading system if they are satisfied with it.

Habit and Continuance Behavior: Habit refers to a well-learned action sequence, originally intended, triggered by environmental factors in a stable context, which is repeated without conscious thought (Bhattacherjee & Lin, 2015). One of the factors determining behavioral intention in IT adoption is habit (Talukder et al., 2018). The more a behavior is performed habitually, the less cognitive planning it requires (Bhattacherjee & Lin, 2015). Habit has a significant influence on behavior intention and usage behavior in previous studies (e.g., Khan et al., 2018; Venkatesh et al., 2012). It implies that the habit of using IT could lead to continued use. This paper assumes that investors' habit of continuing to use the NEPSE online trading system could lead to their continued use of the NEPSE online trading system.

Subjective Norms and Continuance Intention: The concept of subjective norms refers to an individual's subjective judgment of whether an action performed by him or her is acceptable or disapproved by a majority of people who are significant to him or her (Ajzen, 1991). An individual can develop the intention to engage in a specific behavior under social pressure, even if they do not wish to engage in that behavior (Venkatesh & Davis, 2012). IT continued users are more likely to use IT services when they believe their friends or colleagues approve of the use (e.g., Bhattacherjee & Lin, 2015). Since online stock trading occurs in a realistic organizational environment, the researchers anticipate that subjective norms have a significant influence on the intention to adopt the system (Lee-Partridge & Ho, 2003). This paper assumes that the influence of peers, friends, and coworkers has a significant influence on the continuance intention of the NEPSE online trading system.

Disconfirmation, Perceived Usefulness and Satisfaction: A perceived discrepancy between pre-usage expectations and performance is used to quantify disconfirmation (Bhattacherjee & Lin, 2015). Prior studies have found that disconfirmation has a significant influence on perceived usefulness (e.g., Bhattacherjee, 2001a; Bhattacherjee, & Lin, 2015). Likewise, according to ECT a product's

expectations and how well it meets those expectations influence user satisfaction, which determines (behavioral) intention in terms of continuation or discontinuance (Kari et al., 2018). Prior studies have found that disconfirmation has a significant influence on satisfaction (e.g., Bhattacherjee, 2000; Bhattacherjee, 2001a; Bhattacherjee, & Lin, 2015). When it comes to stock trading, investors are more likely to continue the behaviors of the NEPSE online trading system if they have benefited from services provided by the system.

Conceptual Framework and Hypotheses Development: Based on the empirical evidence and assumptions, this paper proposed the conceptual framework (see figure 1) and research hypotheses;

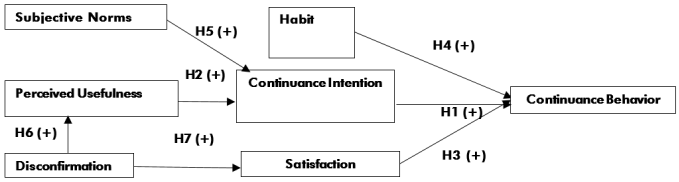

Figure 1: Conceptual Framework (Adapted from Bhattacherjee and Lin, 2015)

Continuance intention positively influences continuance behavior of online stock trading.

Hypothesis 2: Perceived usefulness positively influences continuance intention of online stock trading.

Hypothesis 3: Satisfaction positively influence continuance behavior of online stock trading.

Hypothesis 4: Habit positively influences continuance behavior of online stock trading.

Hypothesis 5: Subjective norms positively influence continuance intention of online stock trading.

Hypothesis 6: Disconfirmation of expectation positively influences perceived usefulness of online stock trading.

Hypothesis 7: Disconfirmation of expectation positively influences satisfaction of online stock trading.

3. Methodology

Sample and Procedure: The population of the study is online stock traders in the Kathmandu Valley who had experience trading in secondary markets for at least two years and who had experience using online stock trading platforms. Likewise, this study applied a purposive sampling technique because the sampling frame for online stock traders were not available and stock traders had privacy and ethical issue of sharing the information. Henceforth, purposive sampling was applied to investigate the continued adoption behavior of online stock trading. Although purposive sampling could provide biased responses, the researchers made an effort to reduce the potential biases by collecting data from respondents who have different investment experiences and frequency of investment in online and regular trading to reduce the sampling biases. According to Hair et al. (2016), the sample size should be at least five times larger and no more than 10 times larger than the items utilized in complex multivariate approaches. Since this paper has 21 items (see in the appendix section) to capture variables of interest, a sample size of 120 to 240 is required for data analysis. Due to the homogenous nature of stock investors, this paper collected 271 samples, assuming the adequacy of the sample size for the study.

Measures: The continuance intention, subjective norms, perceived usefulness, satisfaction, disconfirmation, habit and continuance behavior were measured from the scale adapted from Bhattacherjee and Lin (2015). The responses were anchored in 5 point Likert Scale ranging from 1 to 5 (1= "strongly disagree", 5= "strongly agree) with higher scores representing the likelihood of performing behaviors. There were 21 items for 3 items per construct and 4 items for demographic information. The detail of the measurements are attached in the appendix section.

Data collection and analysis procedure : A pilot test was carried out with 30 investors to assess feasibility, duration, cost, adverse events, before a full-scale research project. This study applied IBM SPSS for pilot testing and found that Cronbach's alpha values were greater than 0.60 (Pallant, 2020).The Cronbach's alpha of each item are continuance intention (Alpha=0.661), continuous behavior (Alpha=0.791), subjective norms (Alpha=0.792), habit (Alpha=0.794), disconfirmation (Alpha=0.761), perceived usefulness (Alpha=0.819), satisfaction (Alpha=0.802) all were the individual scores for the measures. Since values of Cronbach alphas were over 0.750, the researchers contacted stock traders and requested them to fill out questionnaires. The structured digital and printed questionnaires were distributed to collect data from potential respondents. The data were collected from January, 2022 to March, 2022. The researcher cleaned data for identifying improper coding, unengaged responses, and missing entries. The replies have been appropriately coded. A total of 271 out of 302 responses were returned for further study. The data were analyzed using SPSS 25 and AMOS 23.

4. Results and Discussion

Demographic characteristics include gender, age, investors experience and frequency of online stock trading. There were 271 stock investors in the study. It is found that the percentage of the category is around 50 and below.

Table 1: Demographic profile of the respondents

Demographic Variables	Frequency	Percent (%)
Gender		
Male	144	53.1
Female	127	46.9
Age		
Below 20	4	1.5
21-30	134	49.4
31-40	91	33.6
Above 40	42	15.5
Investors Experience		
Since 1 years	50	18.5

Since 2 years	58	21.4
Since 3 years	50	18.5
Since 4 years	45	16.6
Since 5 years and before	68	25.1
Frequency of Online-Trading		
At least once a day	66	24.4
At least once a week	104	38.4
At least once a month	83	30.6
At least once a year	18	6.6

Note. Based on authors' calculation

The table 1 shows the most frequent gender in online stock trading is male (n= 144, 53.1). Likewise, about equal of the respondents were age group of 21-30 (n=134, 49.4%). Moreover, respondents have trading experience from 2 years (n=58, 21.4%). It describes the users of online trading have a sound experience of trading. Finally, the frequent observed respondents do online stock trading at least once a week (n=104, 38.4%). It illustrates that online traders can capture variables such as satisfaction, habit and continuance behaviors.

Common Method Biased: Herman's single factor test was used to examine the presence of common method bias in the study. The result of un-rotated single component factor analysis showed 36.25% of the variation was explained by unrotated single components. This value is less than the suggested minimum threshold of 50% (Podsakoff et al., 2003). Therefore, the data set does not have issues of common method biases.

Structural Equation Model: The Structural Equation Model (SEM) is commonly used to examine the cause-and-effect connection between latent components (Hair et al., 2016). Covariance-Based Structural Equation Modeling (CB-SEM) and Variance-Based Structural Equation Modeling (PLS-SEM) are the two forms of SEM.

The primary objective of CB-SEM is to evaluate the fit between a suggested theoretical model and the observed covariance matrix, or how well the model captures the reality of the setting under examination (Hair et al., 2017b). It assumes data set is normally distributed. In our data, Skewness and Kurtosis values range between -2 and 2. It implies that data set is normally distributed (Hair et al., 2017b). Since the purpose of the paper is to re-estimate the established theory in the online stock trading behavior and data is normally distributed, this paper applied CB-SEM to estimate the measurement and structural model.

Measurement Model: This article used three criteria from the measurement model such as the reliability analysis, convergent validity, and discriminant validity proposed by Ringle et al. (2015). Before evaluating the measuring model as a whole, each construct was evaluated separately. Any item with an alpha coefficient less than 0.50 is suggested to be omitted from the study (Joreskog & Sorbom, 1993).

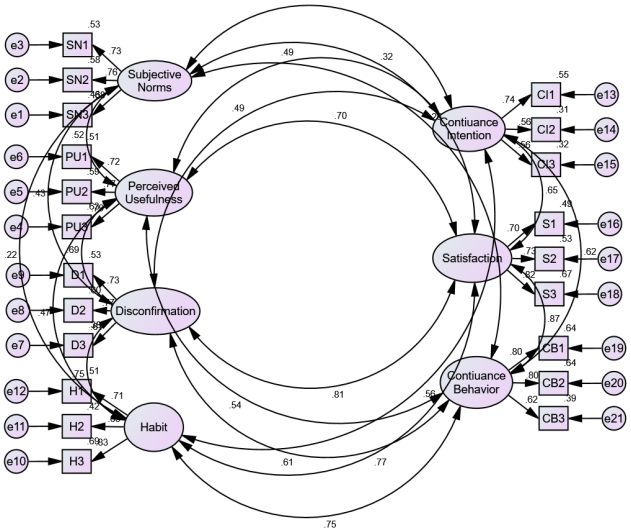

Figure 2: Measurement Model

Model Fitness: Model fit is the term used to describe a model that suggests relationships between variables in a dataset. To estimate structural model, the different model fitness indicators should be satisfied such as Chi-Square(CMIN)/Degree of Freedom (DF), Root Mean Square Error of Approximation (RMSEA), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Parsimonious Comparative Fit Index (PCFI) and Parsimonious Normed Fit Index (PNFI) (Gaskin, 2020). Since the threshold value of each indicator is shown together with their observation values, it satisfies model fitness. The model identification has shown just-identified model from the parameter values.

Table 2: Model fitness indicators

Fit Indicators	Authors	Threshold values	Observation values
CMIN/DF	Hair et al. (2009)	< 3	1.830
RMSEA	Meyers et al. (2005)	< 0.50	0.084
GFI	Segars and Grover (1993)	> 0.90	0.868
AGFI	Hair et al.(2016)	> 0.80	0.820
PCFI	Meyers et al. (2005)	> 0.50	0.738
PNFI	Meyers et al. (2005)	> 0.50	0.762

Note. Based on authors' review

Reliability Analysis: The model's reliability was estimate using values of Composite Reliability and Cronbach's Alpha. The Cronbach's alpha coefficients of scale are greater than 0.60, indicating measurement model is reliable (Pallant, 2011). Furthermore, the construct's composite reliability (CR) must be greater than 0.70 to be reliable. Since all the values of CR are higher than 0.7, the construct shows reliability of the measurement model (see table 2).

Validity Analysis: To attain adequate convergent validity, Factor loadings and AVE need to be more than 0.7 and 0.5 respectively

(Hair et al., 2016). The factor loadings and AVE values are more than 0.70 and 0.50, respectively, according to Table 3. The majority of factor loading is greater than 0.70 except Subjective Norms (SN3), Disconfirmation (DC3), Habit (HB2), Continuance Intention (CI2, CI3), and Continuance Behavior (CB3). The AVE of continuance intention is less than 0.50. However, the rest of the construct supports the stated criteria. Thus, it ensures validity of the model as per proposed criteria.

Table 3: Measurement model

Construct	Indicators	Factor Loadings	AVE	CA	CR
Subjective Norms	SN1	0.730	0.557	0.766	0.715
	SN2	0.762			
	SN3	0.679			
Perceived Use-fulness	PU1	0.718	0.577	0.803	0.803
	PU2	0.766			
	PU3	0.792			
Disconfirmation	DC1	0.728	0.503	0.731	0.751
	DC2	0.775			
	DC3	0.615			
Habit	HA1	0.714	0.538	0.779	0.776
	HA2	0.647			
	HA3	0.828			
Continuance Intention	CI1	0.740	0.391	0.635	0.654
	CI2	0.556			
	CI3	0.562			
Satisfaction	SAT1	0.700	0.566	0.790	0.796
	SAT2	0.731			
	SAT3	0.821			
Continuance Intention	CB1	0.802	0.559	0.781	0.789
	CB2	0.802			
	CB3	0.624			

Note. Based on authors' calculation; *AVE= Average Variance Explained, CR=Composite Reliability, CA= Cronbach Alpha*

Discriminant Validity: Discriminant validity is an assessment of how far its indications differ from those of another concept (Bagozzi et al., 1991). It ensures if the correlations between items in any two constructs are less than the square root of the average variance shared by items within a construct (Fornell & Larcker, 1981). The table 4 indicates that the values in the diagonal (square root of AVEs) are greater than the correlation coefficients, indicating acceptable discriminate validity. The result shows discriminant validity of the model.

Structure Model: The structural model estimates each potential dependency based on path analysis (Bagozzi et al., 1991). The estimate of each potential dependency represents the degree to which one variable affects another, directly or indirectly, in the system being studied. This is recursive model, without reverse causality from dependent variable to independent variable. The number of distinct sample moment are 231 and parameters to be estimated are 50. This model has three endogenous variables (continuance behavior, continuance intention, and perceived behavior) and exogenous variables 6 exogenous variables (subjective norms, perceived usefulness, continuance intention, satisfaction, habit). The following structural equations are used to express the relationships in the proposed structural model (see figure 3).

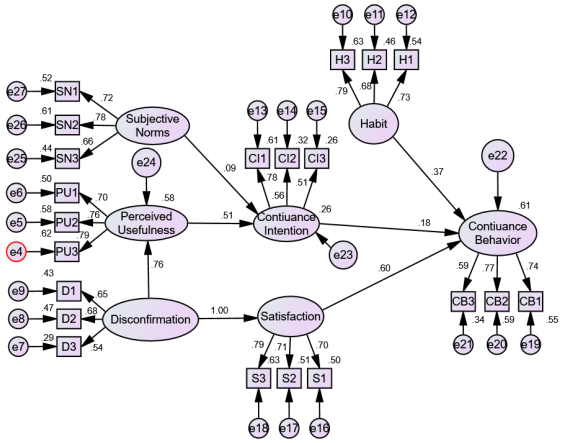

Figure 3: Structural Model

Table 4: Discriminant Validity (Fornell and Larker' Criteria)

Constructs	1	2	3	4	5	6	7
1. Continuance Intention	0.752						
2. Subjective Norms	0.214**	0.746					
3. Perceived Usefulness	0.365**	0.415**	0.759				
4. Satisfaction	0.478**	0.252**	0.561**	0.709			
5. Disconfirmation	0.369**	0.345**	0.529**	0.626**	0.730		
6. Habit	0.429**	0.158**	0.368**	0.581**	0.594**	0.625	
7. Continuance Behavior	0.467**	0.219**	0.440**	0.694**	0.514**	0.575**	0.747

Note. Based on authors' calculation

Table : Result of Hypotheses Testing

Hypotheses	Estimate	S.E.	C.R	P-value	Label
PU<-- DC	0.793	0.113	7.011	***	Significant
CI<-- SN	0.123	0.790	1.558	0.119	Not Significant
CI<-- PU	0.139	0.118	1.170	0.242	Not Significant
CI<--SAT	0.644	0.140	6.176	***	Significant
CB<-- HB	0.290	0.054	5.371	***	Significant
CB<-- CI	0.093	0.750	1.232	0.218	Not Significant
CB<-- SAT	0.718	0.100	7.216	***	Significant

Note. Based on authors' calculation; *CI=Continuance Intention; CB= Continuance Behavior; CR= Critical Ratio; DC= Disconfirmation; HB= Habit; PU = Perceived Usefulness; SN= Subjective Norms; SAT= Satisfaction*

The table 5 shows the result of hypotheses testing. H1 evaluates whether disconfirmation has a positive influence on perceived usefulness for adopting online stock trading. The result shows that disconfirmation has a significant influence on perceived usefulness (β=0.793, P<0.05). Therefore, H1 is confirmed. It implies that one unit change in disconfirmation increases perceived usefulness by 0.793 unit. Second, H2 examines whether subjective norms positively influence on continuance intention to adopt online stock trading. But the result shows subjective norms has no significant influence on continuance intention to adopt online stock trading (β=0.123, P>0.05).Therefore, H2 is not confirmed.

Third, H3 investigates whether perceived usefulness has a positive influence on continuance intention to adopt online stock trading. The result shows perceived usefulness has no significant influence on continuance intention to adopt online stock trading (β=0.139, P>0.05).Therefore, H3 is not confirmed. Fourth, H4 examines whether satisfaction has a positive influence on the continuance intention to adopt online stock trading. The result shows satisfaction has significant influence on continuance intention to adopt online stock trading (β=0.644, P<0.05). Therefore, H4 is confirmed. It implies that one unit change in satisfaction increases perceived usefulness by 0.644 unit.

Fifth, H5 investigates whether habit has positive influence on continuance behavior to adopt online stock trading. The result shows habit has significant influence on continuance behavior to adopt online stock trading (β=0.29, P<0.05). Hence, H5 is confirmed. It implies that one unit change in habit increases continuance behavior by 0.290 unit. Hypothesis H6 examines whether continuance intention influences continuance behavior in adopting online stock trading. The result shows continuance intention has no significant influence on continuance behavior to adopt online stock trading (β=0.093, P>0.05). Thus, H6 is not confirmed. Finally, H7 investigates whether satisfaction has positive influence on continuance behavior to adopt online stock trading. The result shows satisfaction has a significant influence on continuance intention to adopt online stock trading (β=0.718, P<0.05). Therefore, H7 is confirmed. It implies that one unit change in satisfaction increases continuance behavior by 0.718 unit.

Discussion

First, the result shows that disconfirmation of online stock trading platforms has a significant influence on the perceived usefulness of stock trading behavior. It is consistent with previous studies (Bhattacherjee & Lin, 2015). This implies that investors' confirmation of the expected performance of online stock trading platforms would increase the usefulness of online stock trading. The result is aligned with the ECT (e.g., Bhattacherjee, 2000; Bhattacherjee, 2001a; Bhattacherjee, & Lin, 2015). The result implies that the fulfillment of expectations online stock trading platforms such as the NEPSE online trading system can lead to the perceive usefulness of the online stock trading platforms.

Second, the study found that subjective norms have no significant influence on continuance intention. It is consistent with previous studies (Jantarakolica & Jantarakolica, 2018). The result implies that when our family members and colleagues suggest using online trading, investors are not likely to continue using it because investing in the stock is a highly involved decision. It demands resources such as money, henceforth, investors do not intend to continue using online stock trading due to the high risk of investing in online stock investing.

Third, the result shows that perceived usefulness has no significant influence on continuance intention. It is consistent with previous studies (e.g., Tsai et al., 2014). This result implies that the perceived usefulness of NEPSE online trading system would not increase the continuance intention of online stock trading. This study argues that due to the limited alternatives of online trading platforms, online stock investors are using the online stock trading system even without perceiving the usefulness of the technological services provided by service providers.

Fourth, the result shows that satisfaction has a positive impact on continuance intention. It is consistent with previous study (Bhattacherjee & Lin, 2015). The result reveals that satisfied investors continue to intend to adopt online stock trading. It is aligned with the ECT (Bhattacherjee, 2000; Bhattacherjee, 2001a; Bhattacherjee, & Lin, 2015; Pokhrel & K.C., 2023). When online stock investors are satisfied by NEPSE online trading system, they are likely to continue using the system in the future as well.

Fifth, the result shows that habit has a positive influence on continuance behavior. It is consistent with previous studies (e.g., Tsai et al., 2014). Based on the ECT theory (Bhattacherjee, & Lin, 2015), the result reveals that investors' habit of continuance using stock markets would result in the continuance behavior of online stock

trading. The regular usage of the NEPSE online trading system could develop habits over the period and result in continuance behavior of online trading behaviors.

Sixth, according to the results, continuance intention does influence continuance behavior. Although the result contradicts the previous literature, this paper argues that habit and satisfaction are the other two major variables to explain continuance behavior. When investors are satisfied with the services provided by the NEPSE online trading system, they are likely to habituate using it and result in the long run usage of the online stock trading system.

Finally, the result shows that satisfaction has a positive impact on continuance behavior. It is consistent with previous studies (e.g., Tsai et al., 2014). This aligns with ECT theories (Bhattacherjee & Lin, 2015). When investors are satisfied with the services provided by online trading systems, they are likely to continue using them in the future as well.

5. Conclusion

Online stock trading has unravel different factors of investment behaviors in Nepal. This paper has attempted to examine the critical factors for explaining continuance using behaviors of the NEPSE online trading system. Applying cross-sectional survey design and analyzing data with SEM, this paper revealed that satisfaction and habit are two major predictors of online trading continuance behaviors. The concerned authority should work on improving the satisfaction of the NEPSE online trading system and eventually promote change to make habitual use of the system. The evidence of the study can support policymakers in understanding these consumer behaviors and preparing strategies for effectively managing online trading systems.

Suggestions

The paper is theoretically and managerially valuable to different stakeholders. This paper found that satisfaction and habit are the most important factors influencing the continuance behavior of online stock trading. Moreover, disconfirmation positively influences perceived usefulness and satisfaction significantly influences continuance intention of online stock trading. Theoretically, this paper re-tested the extended ECM in continuance adoption of online stock trading among investors in Kathmandu Valley. The model has explanatory power of 0.70 which implies that this model can explain 70 variance of continuance adoption behavior. This result could substantiate the extended ECM in online stock trading context. It provides a critical juncture in understanding the continued adoption of online stock trading among investors in Kathmandu Valley. Managerially, this research paper provides useful information to the Securities Board of Nepal (SEBON) on the adoption of online stock trading. SEBON could design an awareness campaign to increase the importance and benefits of online stock trading to the general public. In the campaign, SEBON could emphasize on service quality of the online stock trading system, rate of satisfaction from previous users, and regularity of previous investors in the message of their promotional campaign (Pokhrel & K.C., 2023). Likewise, Nepal Stock Exchange Ltd. (NEPSE) Trade Management System (TMS) has facilitated electronic share trading. It is necessary to have an online stock trading system that allows investors to buy or sell assets and settle their deals in less time. Due to the heavy dependence on brokers on the securities market, this paper proposed a system model to increase investors' direct dependence on the secondary market. Moreover, SEBON could consider individuals' psychological constructs such as satisfaction to understand online stock trading behavior. Finally, the Nepal Rastra Bank (NRB) in association with SEBON could prepare regulatory framework from E-payment department dividing institutional and behavioral regulation of online stock trading. The NRB could start annual survey on satisfaction, perceived usefulness and habit aspects of online stock trading of consumers. This effort could increase continuance adoption of e-payment (including online stock trading among investors).

Although this paper provided meaningful contributions, the findings of the study have to be interpreted with caution. First, the respondents of the study were mostly between the age group of 21 and 30 years. Therefore, the results of the study may not be generalizable to all age groups. Second, this paper has applied purposive sampling method, therefore, future researchers could use probability sampling to collect data from the entire Nepal. Third, the traditional approach was used to investigate common biases in this paper. Future research could use more advanced techniques, such as marker variables to detect common method biases. Finally, online stock trading is a relatively new phenomenon; therefore, future research could examine the continuance of online stock trading using a qualitative approach.

Acknowledgment

There is no conflict of interest among authors. The Graduate Research Report (GRR) is the thesis work of Sunita Sapkota. The GRR was revised and reanalyzed for the publication from SAIM College.

Disclosure statement / Conflict of interest: None

Funding Information: None

Authors' contributions : Laxman Pokhrel: Data analysis and interpretation; Drafting the article, and final approval of the version to be published.

Sunita Sapkota: Conception or design of the work and Data collection.

Disclosure statement / Conflict of interest: The author declares no conflict of interest.

Ethical statement: This research did not require ethical approval as it does not involve any human or animal experiments.

Data deposition: Data have been used only for this paper.

Author ORCID information:

Laxman Pokhrel
https://orcid.org/0000-0002-8918-5819

References

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. Retrieved from DOI: 10.1016/0749-5978(91)90020-T

Bagozzi, R. P., Yi, Y., & L. W. Phillips. 1991. Assessing Construct Validity in Organizational Research. *Administrative Science Quarterly*, 421-458. Retrieved from DOI: 10.2307/2393203

Bhattacherjee, A. (2000). Acceptance of e-commerce services: the case of electronic brokerages. *Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans, 30*(4), 411-420. Retrieved from DOI: 10.1109/3468.852435

Bhattacherjee, A. (2001a). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision Support Systems, 32*(2), 201-214. Retrieved from DOI: 10.1016/S0167-9236(01)00111-7

Bhattacherjee, A. (2001b). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly,* 351-370. Retrieved from DOI: 10.2307/3250921

Bhattacherjee, A., & Lin, C. P. (2015). A unified model of IT continuance: three complementary perspectives and crossover effects. *European Journal of Information Systems, 24*(4), 364-373. Retrieved from DOI:10.1057/ejis.2013.36

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340. Retrieved from DOI: 10.2307/249008

De Guinea, A. O., & Markus, M. L. (2009). Why break the habit of a lifetime? Rethinking the roles of intention, habit, and emotion in continuing information technology use. *MIS Quarterly*, 433-444. Retrieved from DOI: 10.2307/20650303

Devkota, N., Budhathoki, A., Paudel, U. R., Adhikari, D. B., Bhandari, U., & Parajuli, S. (2021). Online stock trading Effectiveness in Nepal Share Market: Investors Awareness, Challenges, and Managerial Solution. *Asian Journal of Economics, Business and Accounting, 21*(5), 90-98. Retrieved from DOI: 10.9734/AJEBA/2021/v21i530385

Fornell, C., & D. F. Larcker. 1981. Structural Equation Models with Unobservable Variables and Measurement Error: *Algebra and Statistics*. Retrieved from DOI: 10.1177/002224378101800313

Gaskin, J. (2021). Model Fitness. *Gaskination's Stat Wiki*, Available at http://statwiki.gaskination.com

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.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & M. Sarstedt. 2016. (2nd ed.). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, CA: Sage.

Jantarakolica, K. & Jantarakolica, T. (2018). Acceptance of Financial Technology in Thailand: Case Study of Algorithm Trading, Banking and Finance Issues in Emerging Markets, *International Symposia in Economic Theory and Econometrics,* 25, 255-277. Retrieved from DOI: 10.1108/S1571-038620180000025011

Jöreskog, K. G., & Sörbom, D. (1993). LISREL 8: Structural equation modeling with the SIMPLIS command language. Scientific software international.

Kari, T., Makkonen, M., Frank, L., & Kettunen, E. (2018). User expectations, use experiences and continued adoption of a mobile secure communication application. Mediterranean Conference on Information Systems.

Khan, S. U., Liu, X., Khan, I. U., Liu, C., & Hameed, Z. (2018). Measuring the effects of risk and cultural dimensions on the adoption of online stock trading: A developing country perspective. International Journal of Enterprise Information Systems, 14(3), 106-127. Retrieved from DOI: 10.4018/IJEIS.2018070106

Lee-Partridge, J. E., & Ho, P. S. (2003, January). A retail investor's perspective on the acceptance of Internet stock Trading. In 36th Annual Hawaii International Conference on System Sciences.DOI: 10.1109/HICSS.2003.1174437

Obal, M. (2017). What drives post-adoption usage? Investigating the negative and positive antecedents of disruptive technology continuance adoption intentions. *Industrial Marketing Management*, *63*, 42-52. Retrieved from DOI: 10.1016/j.indmarman.2017.01.003

Pallant, J. 2020. SPSS Survival Manual: A Step By Step Guide to Data Analysis using IBM SPSS. Routledge.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & N. P. Podsakoff. 2003. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *The Journal of Applied Psychology 88*(5), 879-903. Retrieved from DOI: 10.1037/0021-9010.88.5.879

Pokhrel, L. (2022). The Frequency of Mobile Banking Use during COVID-19. *NRB Economic Review, 34*(1), 24-48. DOI: 10.3126/nrber.v34i1.47992

Pokhrel, L. and K.C., A. (2023). Mobile banking service quality and continuance intention: mediating role of satisfaction: a two-stage structural equation modeling-artificial neural network approach, *International Journal of Bank Marketing*, Vol. ahead-of-print No. ahead-of-print. DOI: 10.1108/IJBM-11-2022-0512

Ramayah, T., Rouibah, K., Gopi, M., & Rangel, G. J. (2009). A decomposed theory of reasoned action to explain intention to use Internet stock trading among Malaysian investors. *Computers in Human Behavior, 25*(6), 1222-1230.

Rashid, M., & Nishat, M. (2009). Satisfaction of retail investors on the structural efficiency of the market: Evidence from a developing country context. *Asian Academy of Management*

Journal, 14(2).

Ringle, C., Da Silva, D., & D. Bido, 2015. Structural Equation Modeling with the Smartpls. *Brazilian Journal of Marketing 13*(2). Retrieved from https://ssrn.com/abstract=2676422

Shankar, V., Urban, G. L., & Sultan, F. (2002). Online trust: a stakeholder perspective, concepts, implications, and future directions. *The Journal of Strategic Information Systems, 11*(3-4), 325-344. Retrieved from DOI: 10.1016/S0963-8687(02)00022-7

Singh, A., & Malhotra, M. (2016). Factors influencing the adoption of online stock trading: A study of individual investors. *IOSR Journal of Business and Management, 18*(10), 21-26.

Talukder, M.S., Chiong, R., Bao, Y., & Hayat Malik, B. (2019). Acceptance and use predictors of fitness wearable technology and intention to recommend: An empirical study, *Industrial Management & Data Systems, 119*(1), 170-188. DOI: 10.1108/IMDS-01-2018-0009

Tsai, C. H., Zhu, D. S., Wang, S. R., & Jian, L. Y. (2014). A Study of Continuance Usage Behavior for Online Stock Trading-Domestic Brokers of Securities Industry as Examples. *International Conference on Advanced Applied Informatics,* 263-268.

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. Retrieved from DOI: 10.2307/41410412