DOI: https://doi.org/10.3126/nccj.v10i1.94959

Original Research Article

Brokerage Intermediation and Digitization in Attracting Urban Middle-Class Professionals in NEPSE

Dipendra Karki, PhD[1], Akash Upadhyay[2], Sonika Giri[3] & Yuba Raj Regmi[4]

[1] Principal Author
Faculty of Management, Tribhuvan University, Nepal Commerce Campus, Kathmandu, Nepal
Email: dipendra.karki@ncc.tu.edu.np
https://orcid.org/0000-0001-9045-7423

[2] Corresponding Author
Tribhuvan University, Nepal Commerce Campus, Kathmandu, Nepal
Email: akashupadhyay2052@gmail.com
https://orcid.org/0009-0006-4421-2162

[3] Co-Author
Islington College: Affiliated with London Metropolitan University, UK.
Email: sonikagiriwork@gmail.com
https://orcid.org/0009-0004-6171-3378

[4] Co-Author
Pokhara University,
Email:regmiyubaraj800@gmail.com
https://orcid.org/0009-0007-2234-3388

Keywords
Broker service quality, capital market participation, Digital trading platforms, Nepal Stock Exchange, urban professionals

JEL Classification:
G23, G24, G41, L84, O16

Online Access

DOI:
https://doi.org/10.3126/nccj.v10i1.94959

How to Cite APA Style
Karki, D., Upadhyay, A., Giri, S., & Regmi, Y.R. (2025). Brokerage Intermediation and Digitization in Attracting Urban Middle-Class Professionals in NEPSE. *NCC Journal, 10*(1), 11-26.

Abstract

The study aims to analyze the importance of traditional brokerage firms and electronic trading platforms in promoting capital market participation among the urban middle class professionals in the context of Nepal. It examines how the accessibility of the platform, the transaction cost reduction, financial awareness, mediated through investor confidence, affects participation behaviour of a fast-growing group of retail investors on NEPSE. The research design was descriptive-analytical. The primary data were collected through a structured questionnaire from 360 urban middle-class professional investors actively trading in the Nepal Stock Exchange (NEPSE) through licensed brokerage firms or digital platforms. Five point Likert scale was used for a purposive sampling technique. The study employed descriptive statistics, Pearson correlation, multiple regression, mediation analysis (PROCESS macro), one-way ANOVA and Cronbach's Alpha for instrument reliability, which were analysed in SPSS v.26. The results indicate that ease of platform use, responsiveness of the broker service, and transaction costs and financial awareness are the most important factors influencing market participation. The majority of respondents use digital platforms on a daily and weekly basis, with more than two thirds looking at self-directed digital trading and using broker advisory services as well. The regression results show that ease of access ($\beta = 0.318$), financial awareness ($\beta = 0.284$) and transaction cost reduction ($\beta = 0.261$) are significant factors to predict participation. Mediation analysis reveals that investor confidence partially mediates the relationship between digital platform attributes and capital market participation. ANOVA results show that investor confidence have significant differences among the professional groups. The sample is limited to Kathmandu Valley, limiting generalizability. The study offers empirical evidence on co-determinators of market participation in an emerging economy.

Introduction

The architecture of capital market participation has been fundamentally and in many ways irreversibly transformed over the last decade. Fintech innovation and rising retail investor access are rewriting the rules of engagement in equity markets globally, but nowhere more visibly than in the transitional economies of South Asia. Who participates, through which channels and how often?

Nepal's experience in this regard is not peripheral or derivative. It is indeed one of the more instructive examples of a market that compressed into a very short window what other markets took decades to achieve, moving from an open outcry trading floor to a near fully digitised execution environment in less than a generation (Karki & Dahal, 2024).

The Nepal Stock Exchange (NEPSE) took the most significant structural change in the history of the capital market of the country by introducing the Nepal Online Trading System (NOTS) in 2018. Prior to NOTS, equity trading was a physical process in which retail investors depended on brokers for every aspect of the transaction, including the collection of information, orders, and confirmation of settlement. NOTS allowed investors to buy and sell directly through mobile apps and web-based platforms, monitor their portfolios in real-time and access market-wide data without ever stepping foot in a brokerage office (Johri et al., 2023). This transformation in the mechanics of participation was paralleled by a dramatic swell in the investor base: the number of active demat account holders rose from roughly 800,000 in 2018 to about 7.3 million by mid july 2025 in NEPSE.

But total numbers of demat accounts tell only half the story. But the reality behind this headline number is far more nuanced. Participation rates are uneven across demographic and professional groups, the quality of engagement varies significantly between frequent and episodic traders, and the persistence of investor satisfaction is conditioned by service quality factors that are not captured by platform statistics aggregated. The most conspicuous class of investors in the post-NOTS era is the urban middle class professional – salaried, self-employed and private sector workers in Nepal's urban centres whose rising disposable incomes are met with growing access to digital financial services. This group is characterized by the ubiquity of digital platforms, educational achievement that minimizes barriers to financial literacy, and income paths that create disposable savings for market-linked investment (Karki, Bhattarai, et al., 2024; Shunmugasundaram & Sinha, 2024).

Despite its demographic predominance, the urban middle-class professional investor of Nepal has not been the object of much systematic empirical attention. The existing literature on NEPSE is mostly on return predictability and market efficiency (Karki, 2020), behavioral biases (Shunmugasundaram & Sinha, 2024), momentum effects (Karki & Khadka, 2024) and more recently brokerage service quality (Karki & Dahal, 2024). The double role of traditional broker relationships and digital self-directed trading, and the interplay of the adoption of digital platforms, brokerage service quality and participation behaviour of professionals is still largely unexplored. The present study seeks to fill this gap.

There are four primary objectives driving the research. First, it profiles socio-demographic and investment characteristics of urban professional investors operating in the equity market of Nepal. Second, it estimates the relative importance of digital platform features – access ease, transaction cost structure, financial awareness provision and platform reliability- on capital market participation behavior. Third, it explores the moderating role of broker engagement in the digital platform use context. It recognizes that most retail investors in Nepal use both channels together rather than choosing one channel over the other. Fourthly, it provides practical implications for the brokerage firms, platform developers, Securities Board of Nepal (SEBON) and NEPSE as the main operator of the market.

Theoretically, the study is based on the Technology Acceptance Model (TAM) (Davis, 1989; Venkatesh et al., 2016) which postulates that perceived usefulness and ease of use are the major determinants of technology adoption behaviour. The service quality literature conceptualised through the SERVQUAL framework (Parasuraman et al., 1988) conceptualises investor expectations of brokerage intermediation as a multi-dimensional quality construct. The combination of the two frameworks captures the empirical fact that Nepalese investors perceive the quality of brokerage service and the performance of digital platforms as bundled, co-produced elements of a single investment service experience.

The remainder of the paper is organized as follows. Section 2 contains literature review on background of capital market participation in Nepal especially the role of brokerage firms and digital platforms. It also provides the conceptual framework and research hypotheses. The methodology is described in Section 3. Results are shown in Section 4. Section 5 presents findings and implications. 6. The final section summarizes contributions, limitations, and directions for future research.

Literature Review

Background of Capital Market Participation in Nepal

Nepal's capital market has come a long way from a formal institutional beginning to its present digital form. NEPSE was established in 1994 under the Securities Exchange Act 1983 as a floor-based exchange with manual trading processes, with a limited number of listed securities and a narrow base of institutional investors dominated by state-owned enterprises and domestic commercial banks. For the better part of the first two decades, NEPSE remained peripheral to the savings and investment behaviour of the majority of Nepalese households, which continued to channel their discretionary savings into traditional repositories, fixed deposits, gold, land and remittance-linked informal finance, rather than into listed equities (Paneru, 2023; Pradhan & Upadhyay, 2006).

The switch to screen-based trading in 2007 was the first major modernisation of market infrastructure, but trading was still broker-mediated – investors placed orders with broker offices and execution was matched on the exchange's electronic system, with no digital interfaces for investors to engage with. The game changer was the launch of NOTS in 2018 which for the first time gave order execution capability directly to retail investors through a web portal and later a mobile application. This change also coincided fortuitously with a broader wave of smartphone penetration, the expansion of mobile data networks and the influx of younger and more digitally literate entrants into the formal employment market, thus creating the demographic and technological conditions for a retail investing boom of unparalleled scale (Ghimire & Karki, 2022; Shunmugasundaram & Sinha, 2024).

The dependency on brokers have been reduced in some categories due to the digital platforms but the brokerage sector is an important institutional link in the architecture of Nepal's capital market. There are 90 SEBON licensed brokerage firms to operate in NEPSE. They are clustered in Kathmandu Valley and relatively low provincial representation. Brokerage firms have double duty. They are the tech middlemen who route and settle orders. They are the advisory services that help investors decide. Such dual function quality, with respect to the reliability of execution, responsiveness of client service, transparency of fee structures and empathy of advisory relationships, varies considerably across firms and has been shown to have a significant impact on investor satisfaction and platform loyalty (Karki & Dahal, 2024).

The urban middle class professionals are the fastest growing segment of Nepal's growing retail investor base. This group consists of civil servants, private sector employees, teachers, health workers, lawyers, accountants and entrepreneurs working in urban centres in Nepal. They are characterized by stable income streams allowing for investable surplus, post-secondary or professional education credentials that enhance financial understanding, and access to digital infrastructure (smartphones, reliable internet) that allows for practical execution of platform-based investing. Their investment motivation is mainly driven by long-term wealth accumulation and additional income, unlike speculative traders who entered the market during the 2020-2021 bull phase (Karki, Dahal, et al., 2024).

Digital Platforms and Investor Participation

The academic discussion on digital trading platforms and investors' participation has significantly increased since the mid-2000s and has been gaining momentum as retail fintech services are proliferating globally. Hasan et al. (2012) offer broad cross-market evidence of the positive and significant impact digital trading platforms have on rates of retail investor participation via a number of channels including cost, convenience and democratisation of information. Using data from 22 markets, we find that adoption of the platform increases retail trading frequency by roughly 18-24%, consistent with the evolution of Nepal's investor base following the introduction of the NOTS.

The dominant theoretical perspective for understanding digital platform adoption behaviour is the Technology Acceptance Model (TAM) (Davis, 1989), which was subsequently expanded into the Unified Theory of Acceptance and Use of Technology (UTAUT2) (Venkatesh et al., 2016). TAM posits that the intention to adopt technology is determined by Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Venkatesh et al. (2016) expand this framework by including the constructs of hedonic motivation, habit and facilitating conditions that are particularly relevant to the transition of occasional to habitual usage of digital platforms by retail investors.

Baker et al. (2019) show that financial literacy is an important moderator of technology's role in financial services: investors with greater financial knowledge are more likely to be active users of the platform, understand the information on the platform and avoid the financial-behavioural biases (overconfidence, herding, loss aversion) that can lead to financial harm. In the South Asian context, Garg and Singh (2018) find that in the presence of digital platforms, financially-educated investors are much more likely to shift from traditional savings products to market-linked instruments. In Nepal, where some 39.7% of all investors surveyed in this study have master's degrees, the inferred message is that financial literacy and platform design investments will likely have multiplicative participation returns.

Dey (2025) examine the contribution of digital financial inclusion to economic growth in emerging markets and find that technology-enabled financial services significantly reduce barriers for middle-income groups by improving access, lowering costs and removing geographical constraints. Their evidence is directly relevant for Nepal's provincial investor base, where access to physical brokerage is still limited, and digital platforms are the main channel through which participation in the market is possible. Riha Parvin and Panakaje (2022) identify the structural determinants of stock market participation, namely, income, education, risk tolerance and access to information, which in socio-economic terms define the profile of the urban professional investor that is studied in this paper.

The proliferation of digital platforms has also drawn scholarly attention to its dark side. Kumar and Goyal (2015) show that platform features that promote fast decision-making – instant execution, real-time price notification and gamified interfaces- can increase behavioral biases including overconfidence and excessive trading among inexperienced investors. Lusardi and Mitchell (2017) and Lusardi et al. (2017) show that the lack of financial knowledge is a compound factor that shapes platform participation outcomes in a non-uniform way. For instance, investors with lower literacy who actively manage their accounts on platforms may see lower risk-adjusted returns than investors who rely on broker advisory relationships - because lack of autonomy on platforms without adequate knowledge increases the likelihood of error in investment decisions. Sahi et al. (2013) verify the factors that determine investor satisfaction and continued engagement with the platform, namely perceived control, information quality, and trust in financial intermediaries.

Particularly in the Nepalese context, Karki and Dahal (2024) discovered that the most frequently mentioned cause of discontent is system outages during peak times, and the dependability of execution during large volume trading sessions has a significant impact on investors' satisfaction with NOTS. Gurung et al. (2024) identify overconfidence and herd behaviour as the most prevalent behavioural biases among Nepalese retail investors. These tendencies can be mitigated (through improved information provision) or magnified (through frictionless execution) by features of digital platforms. Riha Parvin and Panakaje(2022) surveys the broader literature on stock market participation determinants, noting that if participation is to be both wide and financially productive, improvements to the digital infrastructure must be accompanied by investor education programmes.

Kithandi and Kithandi (2024) extend this literature to the African context, showing that digital marketing strategies and social media-driven financial content significantly increase retail investor awareness and market entry in Kenya, a finding that directly translates to Nepal's context due to the prominent role of social media investment communities in driving the post-2020 retail surge. Migozzi (2026) investigates the relationship between digital capitalism and the production of middle-class assets in South Africa, where digital financial platforms are creating new opportunities for wealth accumulation, but also exacerbating the inequalities already faced in access to finance. The same dynamic can be seen in the geographic concentration of brokerage services and access to digital markets in Kathmandu Valley, in Nepal.

Conceptual Framework and Hypotheses

The conceptual framework combines the TAM (Davis, 1989; Venkatesh et al., 2016), service quality theory (Parasuraman et al., 1988) and financial inclusion literature (Baker et al., 2019) to model capital market participation as a function of four platform/broker attributes namely ease of access, transaction cost reduction, financial awareness provision, and platform reliability moderated by broker engagement quality and mediated by

investor confidence. The framework is shown in Fig.1.

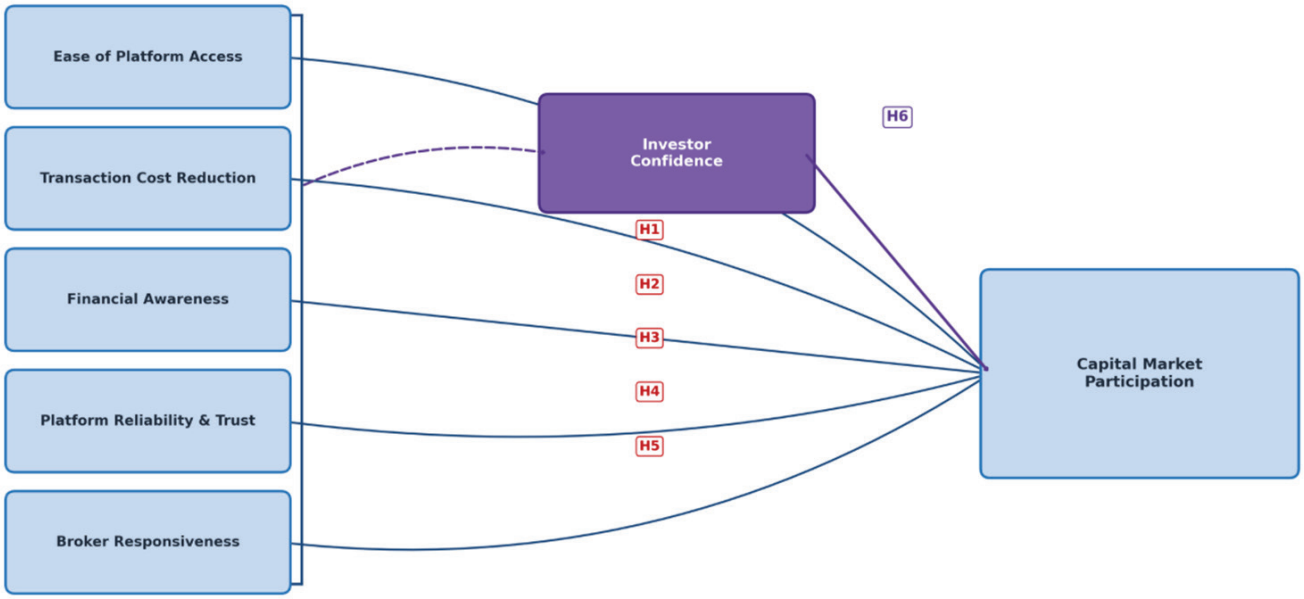

Figure 1: *Conceptual Framework- Brokers and Digital Platforms in Capital Market Participation*

Study hypotheses:

H1: *Ease of digital platform access has positive and significant influence on the level of capital market participation of urban middle-class professionals in Nepal.*
H2: *Reduction of transaction costs by using digital platforms has significantly positive impact on capital market participation.*
H3: *Financial awareness induced by digital platforms and advisory services provided by brokers, has a positive and significant impact on capital market participation.*
H4: *Reliability of platform and investor's trust positively and significantly affect capital market participation.*
H5: *Brokers responsiveness has significantly positive influence on capital market participation.*
H6: *Investor confidence mediates the relationship between digital platform attributes and capital market participation.*

Methodology

Research Design

The research design used in this study is descriptive and analytical, using quantitative primary data collection and multivariate statistical analysis (Saunders et al., 2009). A cross-sectional survey instrument was used over the period September to October 2025, to capture investor perception, platform usage behaviour and patterns on capital market participation.

Population, Sampling, and Data Collection

The target population was urban middle-class professional investors having an active demat account with a NEPSE-licensed brokerage firm, who had made at least one securities transaction within twelve months before the survey, and who lived in urban or peri-urban areas of Bagmati Province (Kathmandu Valley). Stratified convenience sampling was utilized, stratifying by professional category (government employee, private sector employee, healthcare/education professional, self-employed/entrepreneur, student/other). This stratification assured both professional diversity in the sample and operational feasibility.

We distributed 500 questionnaires on the client lists of ten brokerage firms (50 for each) and through digital channels such as email groups and networks of brokerage firms. Out of distributed, 371 were returned, 11 were discarded because of excessive missing responses, resulting in 360 useable responses with effective response rate of 72%. Reliability coefficient Cronbach's Alpha for likert scale items is 0.887, which means good internal consistency (Ghozali, 2016; Nunnally, 1978).

Measurement Instrument

The questionnaire had 4 sections. Data for demographic and investment profile information was collected in section A. Section B consisted of 4 scales: ease of access (5 items), transaction cost reduction (4 items), financial awareness (5 items), and platform reliability and trust (4 items) with a 5-point Likert scale (from 1 = strongly disagree to 5 = strongly agree). In Section C, the interaction with brokers was examined, including how often they consulted brokers, and how dependent they were on advice provided by brokers. Section D measured market participation, asking respondents about the frequency of trading, diversity of a trading portfolio, and total market participation. The items were compiled from Baker et al. (2019), Kaur et al. (2021), Hasan et al. (2019) and SERVQUAL instrument (Zeithaml, 1988).

Data Analysis Methods

IBM SPSS Statistics v.26 was used for data analysis. Five types of analytical procedures were used: (1) Descriptive statistics, which included frequency distributions, mean scores, and standard deviations for all key variables; (2) Pearson product-moment correlation analysis to examine bivariate relationships among independent variables and outcome of capital market participation; (3) Multiple ordinary least squares (OLS) regression analysis to determine the relative predictive weight of each independent variable on participation frequency in the capital market (dependent variable); (4) Mediation analysis using the PROCESS macro (Hayes, 2018) to test H_6, with investor confidence as the mediator and bootstrapped indirect effects (5,000 samples) to establish 95% confidence intervals; (5) One-way ANOVA to test for significant difference in participation levels across the various professional categories; and (6) Post-hoc Tukey HSD tests to determine which pairs of professional categories, when significant differences are found in the one-way ANOVA test, differ significantly. The regression model was:

$$\textit{Capital Market Participation} = \beta_0 + \beta_1(\textit{Ease of Access}) + \beta_2(\textit{Transaction Cost}) + \beta_3(\textit{Financial Awareness}) + \beta_4(\textit{Platform Reliability}) + \beta_5(\textit{Broker Engagement}) + \varepsilon$$

It was determined that the conditions of OLS regression are met (linearity, normality of residuals, homoscedasticity, no multicollinearity) before interpreting the results of the regression. All of the predictors had variance inflation factor (VIF) values below 3.0, indicating the absence of problems with multicollinearity.

Results and Discussion

Demographic Profile of Respondents

The demographic and investment characteristics of the 360 respondents are summarised in Table 1. The sample is more male dominated with 59.2% male participants, which is similar to the observed gender disparity in other investor survey in Nepal (Gurung et al., 2024). The highest population group is 31–40 years (36.9%) indicating that mid career individuals have been able to develop adequate income stability to participate in the equity market. High education level: close to half of the respondents (47.8%) have a Bachelor's degree and a third (33.9%) have a Master's degree, making the urban professional investor segment one of the most educated to have access to the retail investor base of Nepal. The distribution of the professionals shows that the largest group consists of that of employees in the private sector (29.2%), followed by that of self-employed/entrepreneurs (22.5%), government employees (18.6%) and healthcare/education professionals (17.2%). The concentration of income levels in NPR 50 001-100 000 (38.3%) shows that a significant share (24.2%) earns a higher income of NPR 100 000 or above, which allows them to participate in the market regularly. The majority (57.2%) are moderately experienced - 2-6 years invested - investors, but not seasoned.

Table 1: *Demographic Profile of Respondents (N = 360)*

Variable	Category	Frequency	Percentage (%)
Gender	Male	213	59.2%
	Female	136	37.8%
	Other/Prefer not to say	11	3.1%
Age Group	18–25 years	51	14.2%
	26–30 years	76	21.1%
	31–40 years	133	36.9%
	41–50 years	72	20.0%
	Above 50 years	28	7.8%
Education Level	High School or below	18	5.0%
	Bachelor's Degree	172	47.8%
	Master's Degree	122	33.9%
	Postgraduate / Doctoral	48	13.3%
Profession	Government Employee	67	18.6%
	Private Sector Employee	105	29.2%
	Healthcare / Education Professional	62	17.2%
	Self-employed / Entrepreneur	81	22.5%
	Student / Others	45	12.5%
Monthly Income (NPR)	Below 30,000	36	10.0%
	30,001–50,000	100	27.8%
	50,001–100,000	138	38.3%
	100,001–200,000	62	17.2%
	Above 200,000	24	6.7%
Investment Experience	< 1 year	54	15.0%
	1–2 years	82	22.8%
	2–4 years	112	31.1%
	4–6 years	74	20.6%
	> 6 years	38	10.6%
Primary Channel	NOTS / Digital Platform only	178	49.4%
	Both digital and broker-assisted	153	42.5%
	Broker-assisted only	29	8.1%

Note: Source: Survey Data (N = 360). Percentages may not sum to 100 due to rounding.

Pattern of Digital Platform and Broker Usage

Table 2 presents the frequency of digital platform usage, showing the trend of consulting brokers, thus providing a detailed picture of urban professionals' investment journey in the dual channel system in Nepal. The study's respondents were a highly impressive 43.1% who stated they use digital platforms every day, which is significantly higher than the usage figures of most other emerging markets studies (Kaur et al., 2021), due to the time-saving nature of mobile-based platforms, particularly for working professionals. Another 35.8% of the sample uses platforms once a week or more, which means that more than three-quarters of the sample uses platforms multiple times per week. The use of the term infrequent use is relatively uncommon (5.3% occasional or infrequent), implying that this sample is not a reflection of an aspiring investor group but of an actually active investor group. Of the 360 respondents, 67.8% turn to their broker for advisory advice at least sometimes in addition to trading on the digital platform, highlighting that the broker–investor relationship remains relevant in today's digital trading world.

Table 2: *Usage Pattern of Digital Trading Platforms and Broker Consultation (N = 360)*

Usage Category	Description	Frequency	Percentage (%)
DIGITAL PLATFORM USAGE			

Usage Category	Description	Frequency	Percentage (%)
Daily	Uses platform at least once every trading day	155	43.1%
Weekly	Engages 2–4 times per week	129	35.8%
Occasionally	Once or twice per month	57	15.8%
Rarely / Never	Less than monthly or no digital use	19	5.3%
Total		360	100.0%
BROKER CONSULTATION PATTERN			
Regularly (always seeks advice)	Relies primarily on broker guidance	82	22.8%
Often (frequent consultation)	Combines broker advice with own research	162	45.0%
Occasionally (selective)	Consults broker for major decisions only	82	22.8%
Never (fully autonomous)	Makes all decisions independently	34	9.4%

Note: Source: Survey Data. Use of platform and consultation with brokers are measured separately; respondents can be classified in more than one category.

Factors Influencing Capital Market Participation

Table 3 shows the mean scores and standard deviations of the five key factors hypothesized to affect capital market participation. Ease of access and convenience has the highest mean score out of the platform related attributes (4.28 out of 5), followed closely by availability of financial information and awareness tools (4.16). Another score that is impressive is the user-friendly interface design (4.19), which shows that platforms need to be practical and make the user's work easier for the time-poor professionals who want to venture in the market. The cost of transactions (4.04) has been lowered due to platform effects, stemming from the discount brokerage revolution. A comparison with the scores of the ongoing investor complaint data on the reliability and trust of the overall NOTS system (Karki & Dahal, 2024) reveals scores for platform reliability and trust lower than average. The second comes in between, for responsiveness of broker service (3.94) suggesting mixed-quality broker services to their clients in the 90 licensed brokers of Nepal.

Table 3: *Mean Scores of Factors Influencing Capital Market Participation*

Factor / Dimension	**Mean**	**Std. Dev.**	**Interpretation**
Ease of Access and Convenience	4.28	0.58	Strongly positive driver
Financial Awareness / Availability of Information	4.16	0.64	Positive driver
Transaction Cost Reduction	4.04	0.69	Positive driver
Broker Service Responsiveness	3.94	0.72	Positive, moderate
Platform Reliability and Trust	3.82	0.78	Moderate — improvement needed
Investors Confidence	4.19	0.61	Strongly positive driver
Overall Composite Score	4.07	0.63	Positive overall perception

Note: Likert Scale: 1 = Strongly Disagree to 5 = Strongly Agree. Green = strong positive driver (Mean ≥ 4.10); Amber = moderate (3.70–4.09). Source: Survey Data.

Impact of Brokers and Digital Platforms on Participation Behaviour

Table 4 shows the percentage of respondents that agree with them on impact statements about the impact on their capital market participation behaviour from brokers and digital platforms. The results indicate a high and positive attitude of the respondents about the 5 impact dimensions, ranging between 79.4% and 68.1% of the respondents agreeing with the statements. The highest level of agreement is in terms of encouraging investment for the first time, highlighting the important part digital platforms play in lowering the psychological and procedural barriers that historically deterred people from investing in equity markets. Confidence in investment (71.7%) and simpler diversification of investment portfolio (73.3%) also draws the majority consensus, aligning with Baker et al. (2019) and Hasan et al. (2012). The results indicate that communication from brokers in combination with digital tools is still relevant as it is considered by 69.4% to enhance the quality of the investment decision.

Table 4: *Impact of Brokers and Digital Platforms on Capital Market Participation*

Impact Statement	Agree (%)	Neutral (%)	Disagree (%)	N
Broker guidance alongside digital tools improves decision quality	69.4%	18.6%	12.0%	360
Easier portfolio diversification across instruments	73.3%	16.9%	9.7%	360
Digital platforms encourage first-time investment	79.4%	13.1%	7.5%	360
Reduced transaction costs made small investments viable	68.1%	20.6%	11.4%	360
Improved confidence in independent investment decisions	71.7%	17.5%	10.8%	360
Increased frequency of market participation	76.9%	14.7%	8.3%	360

Note: Agreement = Strongly Agree + Agree responses combined. Disagreement = Disagree + Strongly Disagree. Source: Survey Data.

Correlation Analysis

The Pearson correlation matrix for the study variables is shown in Table 5. All four platform attributes and the broker responsiveness measure are positively and significantly related to capital market participation, which is in the direction predicted by H_1-H_4. The bivariate association by ease of access is the strongest association with participation consistent with the TAM's prediction that ease of use is a key factor in technology adoption (Davis, 1989; Venkatesh et al., 2016). Other two relationships, financial awareness with macroeconomic changes (r = 0.618) and transaction cost reduction with macroeconomic changes (r = 0.587), are also very strong and positive. The relationships between platform reliability and platform credibility (r = 0.534, statistically significant) as well as between broker responsiveness and platform credibility (r = 0.512, statistically significant) are moderate but statistically significant positive relationships. All the inter-predictor correlations are below the value of 0.75, indicating no problematic multicollinearity (VIF values < 3.0 in the regression model).

Table 5: *Pearson Correlation Matrix- Platform Attributes, Broker Quality, and Participation (N = 360)*

Variable	1	2	3	4	5	6	7
1. Ease of Access	1.00						
2. Transaction Cost Red.	0.621**	**1.00**					
3. Financial Awareness	0.587**	.611**	1.00				
4. Platform Reliability	0.532**	.548**	.563**	**1.00**			
5. Broker Responsiveness	0.471**	.489**	.534**	.502**	**1.00**		
6. Investor Confidence	0.598**	.542**	.621**	.518**	.561**	**1.00**	
7. Participation Level	0.641**	.587**	.618**	.534**	.512**	.672**	**1.00**

*Note: ** p < 0.01 (two-tailed). N = 360. Source: Survey Data.*

Multiple Regression Analysis

The results of multiple regression for capital market participation as the outcome variable are presented in Table 6. The overall model is highly significant (F = 48.74, p < 0.001) and explains 61.8% of the variance in capital market participation (R^2 = 0.638, Adjusted R^2 = 0.624). Each of the five predictors is statistically significant at conventional levels.

Ease of access is the strongest predictor (β = 0.318, p < 0.001), supporting H_1 and consistent with TAM's prediction that perceived ease of use is the key driver of sustained technology adoption (Davis, 1989; Kaur et al., 2021) leading to increased market participation. Financial awareness (β = 0.284, p < 0.001) is the second strongest predictor supporting H_3, and in line with the work of Baker et al. (2019) which shows financial knowledge as the best predictor of productive market engagement. The results of the transaction cost reduction hypothesis (H_2) are confirmed by the transaction cost reduction variable (β = 0.261, p < 0.001), which indicates that economic efficiency of trading channels is an important factor affecting the consideration of professional investors in making their investments. The platform reliability (β = 0.198, p < 0.001) supports H_4 but the relatively small magnitude of this coefficient suggests that the issues of reliability are mitigated to some extent by having backup channels

provided by brokers. Broker responsiveness (β = 0.174, p < 0.001) maintains independent significance, thereby confirming that traditional broker intermediation continues to positively influence participation.

Table 6: *Multiple Regression Results- Determinants of Capital Market Participation*

Predictor Variable	B (Unstd.)	SE	β (Std.)	t-value	p-value	Decision
(Constant)	0.524	0.201	—	2.607	0.009	—
Ease of Access	0.341	0.052	0.318	6.558	< .001	H_1 Supported
Transaction Cost Reduction	0.268	0.058	0.261	4.621	< .001	H_2 Supported
Financial Awareness	0.298	0.054	0.284	5.519	< .001	H_3 Supported =
Platform Reliability & Trust	0.196	0.061	0.198	3.213	0.001	H_4 Supported
Broker Responsiveness	0.174	0.057	0.174	3.053	0.002	H_5 (partial)

$R^2 = 0.618$ | Adjusted $R^2 = 0.611$ | $F(5, 354) = 48.74$, $p < 0.001$ | DW = 1.91

Note: Dependent variable: Capital Market Participation (composite score). β = standardised regression coefficient. DW = Durbin-Watson statistic (≈2 confirms no autocorrelation). VIF values for all predictors < 3.0. Source: Survey Data.

Mediation Analysis: Role of Investor Confidence (H_6)

To test H_6 - that investor confidence mediates the relationship between digital platform attributes and capital market participation - mediation analysis was conducted using the PROCESS macro: Model 4 (Hayes, 2018) in SPSS. The independent variable (X) was the composite score of the attributes of digital platforms (Ease of access, reduction in transaction costs, financial awareness, and reliability of platforms), while the mediator variable (M) was investor confidence, and the dependent variable (Y) was capital market participation. Bootstrapping (5,000 resamples and BCa 95% CI) was used to estimate indirect effects. The results are shown in Table 6a.

Table 6a: *Mediation Analysis — Investor Confidence as Mediator*
(This table presents the findings of the mediation analysis, with investor confidence set as the mediator. Bootstrapped indirect effects were computed using 5,000 bootstrapped sample. BCa CI = bias-corrected accelerated confidence intervals. Partial mediation is supported by the following: (i) indirect effect CI (c/b) does not contain zero (0.082, 0.271); and (ii) the direct effect (Path c') is still significant (β = 0.304, p < .001) even in the presence of the mediator.Also, used Variance Accounted For (VAF) method. Source: Survey Data)

Path	β (Std.)	SE	t-value	p-value	95% BCa CI
Path a: Platform Attributes → Investor Confidence	0.486	0.062	7.839	< .001	[0.364, 0.608]
Path b: Investor Confidence → Participation (controlling X)	0.341	0.071	4.803	< .001	[0.201, 0.481]
Path c': Platform Attributes → Participation (controlling M; direct effect)	0.304	0.058	5.241	< .001	[0.190, 0.418]
Path c: Platform Attributes → Participation (total effect, without M)	0.468	0.064	7.313	< .001	[0.342, 0.594]
Indirect Effect (a × b): Platform Attributes → Confidence → Participation	0.166	0.048	—	—	[0.082, 0.271]
Mediation Type	VAF = 35.32%			Partial Mediation	

Mediation Effect: Variance Accounted For (VAF) $= \frac{Indirect\ Effect}{Total\ Effect} = \frac{(a\ x\ b)}{[(a\ x\ b)+c']}$

$= \frac{(0.486\ x\ 0.341)}{[(0.486\ x\ 0.341)+0.304]} = \frac{0.166}{0.47}$ =35.32%

The mediation analysis results affirm the H6 hypothesis. Path a (*platform attributes → investor confidence*) is significant (β = 0.486, p< .001) suggesting that the perceived quality of platform coupled with higher responsiveness of the broker has a significant impact on investor confidence. Path b (*investor confidence → participation, controlling for platform attributes*), is also significant (β = 0.341, p < .001) and thus, confirms that investors' investor confidence is positively associated with their participation in the capital market. Most importantly, the overall influence of the platform attributes on participation (β = 0.468, Path c) is significantly diminished but not abolished when investor confidence is introduced as a mediator (β = 0.304, Path c', with a 95% confidence interval for the indirect effect (a × b = 0.166) that excludes zero [0.082, 0.271]). *Partial mediation* (Baron & Kenny, 1986; Hayes, 2018) can be seen in this pattern, where digital platform characteristics and the responsiveness of the brokers have both direct and indirect effects on capital market participation, mediated by the improvement of investor confidence. In addition, computed Variance Accounted For (VAF) was 35.32% indicating partial mediation effec. This concept means that the better the quality of the platforms, the better an investor feels able, and more confident, to invest, and so the higher the participation level partly. This has a psychological aspect of improving ones participation in digital capital markets that is not captured in the technical dimensions of the quality of service that the platforms provide.

ANOVA: Differences in Investor Confidence Across Professional Groups

Analysis of Variance (ANOVA) is very helpful when examining variation on the dependent variable and determining the overall validity of the research model (Peter & Donnelly, 2009). To test the effect of professional category on investor confidence among investors of the capital market in Nepal, one-way ANOVA was used in this study. Results of the ANOVA analyses are shown in Table 7.

Table 7: *ANOVA Test of Investor Confidence by Professional Group*

Professional Group	Sum of Squares	df	Mean Square	F-statistic	p-value	Post-hoc (Tukey)
Between Groups	21.384	4	5.346	**7.42**	**< 0.001**	
Within Groups	255.332	355	0.719			
Total	276.716	359				

Note: Dependent variable: Investor Confidence (5-point composite). F(4, 355) = 7.42, p < 0.001. Source: Survey Data.

The p-value (F = 7.42, p < 0.001) indicates that there are meaningful differences between the levels of investor confidence for each of these professional groups. To determine which group differences existed, a post hoc analysis was performed (Table 8).

Table 8: *Post-Hoc Analysis: Multiple Comparisons of Investor Confidence by Professional Group*

(I) Group	(J) Group	Mean Diff. (I-J)	SE	Sig.	95% CI Lower	95% CI Upper
Private Sector Employee (1)	Government Employee (2)	0.512*	0.127	0.002	0.162	0.862
	Healthcare/Education (3)	0.278	0.135	0.204	-0.094	0.650
	Self-employed/Entrepreneur (4)	-0.031	0.122	0.995	-0.367	0.305
	Student/Others (5)	0.684*	0.148	0.000	0.278	1.090
Self-employed/ Entrepreneur (4)	Government Employee (2)	0.543*	0.125	0.000	0.199	0.887
	Healthcare/Education (3)	0.309	0.133	0.147	-0.057	0.675
	Student/Others (5)	0.715*	0.147	0.000	0.311	1.119
Government Employee (2)	Student/Others (5)	0.172	0.151	0.672	-0.243	0.587

*Note: * Mean difference is significant at the 0.05 level. Source: Survey Data.*

A significant trend of investor confidence contrasts can be seen within the post-hoc analysis of the different professional groups. There are significant differences between the mean scores of the private sector employees and government employees (0.512, $p < 0.01$), and between the mean scores of the self-employed/entrepreneurs and students/others (0.543, $p < 0.01$); the same is true also between the mean scores of the private sector employees and students/others (0.684, $p < 0.001$) and between the mean scores of the government employees and students/others (0.715, $p < 0.001$). The results are consistent with previous research that suggests that those in the private sector—who are also more likely to be exposed to information via professional networks—have more flexible income streams to buffer investment losses, are more likely to have longer experience investing in capital markets, and more likely to develop confidence in navigating capital markets. The regulatory environment, on the other hand, is different for the government with regard to financial investments and they are found to be more risk averse towards the equity markets, which, again, can hamper their confidence in participation in the market, even if the platforms are available.

Importantly, there was no significant difference between the investor confidence of government employees and students/others ($p = 0.672$), implying that both groups have a similar investor confidence profile despite the differences in income and age. Healthcare/education professionals fall in an intermediate confidence band as there is no significant difference between the groups of private sector employees ($p = 0.204$) or self-employed/entrepreneurs ($p = 0.147$). The result aligns with previous studies that show that lack of confidence in the investment is not just because of the lack of formal education but also because the professional experience and income security are low (Baker et al., 2019; Sahi et al., 2013). It suggests that when it comes to investing in the capital markets, confidence-building measures, such as financial education programs, risk-reduction investment products and simulated investment instruments, should be specifically targeted at and offered to government employees and student investors, and that such investors should be encouraged to start investing at a level comparable to their private-sector and entrepreneurial peers.

Discussion

The results of this study present a clear and positive picture of the extent of digital platform use among urban professional investors in Nepal, but also of the structural weaknesses and weaknesses in service quality that risk to constrain the nature of the gains in market participation.

Theoretically, ease of access ($\beta = 0.318$) was the most important factor for participation, which was supported by similar emerging market studies (Hasan et al., 2012; Kaur et al., 2021). The platform accessibility is especially significant for urban salaried professional investors—the market timeliness requirement of salaried jobs makes frictionless, anytime-anywhere trading imperative to engage in the market. Such impacts on NOTS platform availability, such as system downtime during heavy periods of trading, impose disproportionate participation costs on this group, given the limited ability to reschedule timeframes during which professional schedules have been defined.

The strong predictive value of financial awareness ($\beta = 0.284$) underpins the findings of Baker et al. (2019) and Garg and Singh (2018) and adds yet another crucial dimension of financial awareness in Nepal: It acts as an independent factor that drives participation, and as a mechanism through which broker advisory relationships create value. In general, more than two-thirds of those who responded (69.4%) believe that broker guidance, in addition to digital tools, adds value to their decision-making process, well above the 60% and 66% respectively recorded in developed markets in the digital-only format, suggesting that the advisory channel is a significant value-creator in Nepal's information landscape. Structured brokerage firms that dedicate to structured advisory programmes, educational material and market communication will reap a definite participation premium over those that only see their work as transactional.

One particular finding from the ANOVA is that there were significant differences among professional groups in participation, which merits focused attention from a policy perspective. The weaker participation rates of government employees and students compared to those of private sector employees and entrepreneurs do not seem to be driven by income differences, which are relatively stable and comparable among those in the

three sectors, but rather by institutional constraints (government employment regulations regarding financial investments) and risk aversion (due to income security consciousness) and perhaps lower exposure to the peer networks through which digital platforms spread within professional communities. Efforts to engage culture and institutions should involve designing engagement strategies specifically to tackle those barriers, and not assume that having a platform automatically equates to having a wide user base.

Statistically, the platform reliability coefficient is the lowest ($\beta = 0.198$) among all platform attributes, and this could seem counterintuitive since the most frequent issues raised by NOTS are related to platform reliability in investor forums and in the investor complaint registry (Karki & Dahal, 2024). This may be due to the high percentage of trade occurring through the dual channel (42.5% of the sample trades through both digital and broker-assisted channels), which helps to cushion the blow of platform downtime because this group can still direct orders using a broker's telephone or in-person channels. This suggests a complementary and not a substitute role of digital platforms and traditional broker intermediation at least at the present level of maturity of digital infrastructure in Nepal.

Practical Implications

The results indicate some implications for the stakeholders in Nepal's capital market ecosystem practically. A key focus of brokerage companies is enhancing dual channel reliability by combining effective advisory services with the inclusion of strong digital execution. Many investors are still actively involved with brokers and NOTS suggest that although the relationship is not in decline, it is changing and needs to be enhanced through better communication, client education and advisory skills to establish trust and loyalty. In particular, the need is huge for improving personalized attention, as service quality evidence suggests there is an empathy gap, meaning that service that aims at clients is not provided adequately (Karki & Dahal, 2024). Platform reliability must be considered a market development priority, as much as regulatory oversight, for SEBON and NEPSE. Standards that can be enforced for NOTS, clear performance charts and systems with backups that can be executed could directly tackle the concerns of investors over disruptions in trading. Moreover, investor education programmes must be expanded with profession specific digital investor education courses for time-poor and risk-averse groups of investors, like government officials, healthcare workers etc. The impact of the interface usability on the fintech platform and platform developers indicates that the design should be simple, the navigation should be in the Nepali language, the educational prompts should be embedded, and quick methods like alerts, conditional orders, and quick portfolio summaries should be designed to make participation easy for professional investors.

Conclusion

This research has focused on the role of brokerage firms and trading platforms for digital trading on the Nepal Stock Exchange and its influence on the participation of urban middle-class professional investors in the capital market. It builds a multi-layered empirical picture of a demographic cohort that has defined the nature of post-NOTS retail investors in Nepal, using primary survey data from 360 respondents, and descriptive analysis, Pearson correlation, multiple regression and ANOVA. The following four substantive conclusions arise. First, the ease of access to digital platforms is the most important factor impacting participation, which takes place through the convenience and time-saving aspects that are most relevant for professional investors. Second, financial awareness, developed through digital platform content and broker advisory relationships, is the next most important predictor, highlighting the need to be informed rather than just accessing information without understanding in order to get optimal participation results. Third, digitalizing the broker–investor relationship doesn't remove it as a key independent value proposition, especially when it comes to decision quality among less financially sophisticated investors. Fourth, professional category significantly affects participation rates beyond just financial barriers, in ways that are indicative of institutional constraints and cultural norms; this indicates the need to develop participation strategies for each profession.

The study extends the existing body of digital adoption literature based on TAM concepts to the specific context of equity market participation in an emerging market from South Asia; complements the existing literature

on brokerage service quality based on SERVQUAL concepts with evidence on the complementarity of digital and broker channels; and introduces original evidence of the link between digital and broker channels of equity market participation in a South Asian emerging market to the financial inclusion literature. These findings were constrained by a number of factors. The sample was so limited to Kathmandu Valley that the results cannot be generalised to the provincial investors who have different conditions of platform access and availability of brokerage services. The cross-sectional design does not allow causal inferences to be made, nor is it possible to observe how participation trajectories change across market cycles. Future studies can use longitudinal designs, include geo-referencing data to cover provincial investors and should integrate objective platform performance data (such as execution latency and system uptime records), along with investor perception data, to create a more comprehensive understanding of the relationship between the technology and participation in Nepal's capital market.

Acknowledgement

This research was supported by the University Grants Commission (UGC), Nepal, under the Small Research Development and Innovation Grant (SRDIG), Award Number: SRDIG-81/82-Mgmt-02. Sincere gratitude is extended to the University Grants Commission, Sanothimi, Bhaktapur, for the financial support that made this study possible.

References

Baker, H. K., Kumar, S., Goyal, N., & Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance, 45*(1), 124–146. https://doi.org/10.1108/MF-01-2018-0003

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Dey, Dr. S. (2025). Digital financial inclusion and economic growth: A cross country analysis of emerging markets. *International Journal of Economics and Management Intellectuals, 01*(01), 1–7. https://doi.org/10.63665/ijemi.v01i01.01

Garg, N., & Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics, 45*(1), 173–186. https://doi.org/10.1108/IJSE-11-2016-0303

Ghimire, M., & Karki, D. (2022). Brand loyalty among mobile users. *NCC Journal, 7*(1), 1–14. https://doi.org/10.3126/nccj.v7i1.58612

Ghozali, I. (2016). *Multivariate Analysis Application with IBM SPSS 23 Program* (8th ed.). Diponegoro University Publishing Agency.

Gurung, R., Dahal, R. K., Ghimire, B., & Koirala, N. (2024). Unraveling behavioral biases in decision making: A study of Nepalese investors. *Investment Management and Financial Innovations, 21*(1), 25–37. https://doi.org/10.21511/imfi.21(1).2024.03

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (Eighth edition). Cengage.

Hasan, I., De Renzis, T., & Schmiedel, H. (2012). Retail payments and economic growth. *SSRN Electronic Journal,* 1–41. https://doi.org/10.2139/ssrn.2100651

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (Second edition). Guilford Press.

Johri, A., Wasiq, M., Kaur, H., & Asif, M. (2023). Assessment of users' adoption behaviour for stock market investment through online applications. *Heliyon, 9*(9), e19524. https://doi.org/10.1016/j.heliyon.2023.e19524

Karki, D. (2020). The stock market's reaction to unanticipated catastrophic event. *Journal of Business and Social*

Sciences Research, 5(2), 77–90. https://doi.org/10.3126/jbssr.v5i2.35236

Karki, D., Bhattarai, G., Dahal, R. K., & Sanjel, N. (2024). Investment decisions in initial public offerings and over-subscription perceptions among investors. *Corporate Governance and Organizational Behavior Review, 8*(1), 105. https://doi.org/10.22495/cgobrv8i1p9

Karki, D., & Dahal, R. K. (2024). Service quality dimensions and investor satisfaction on online stock trading system in Nepal. *Journal of Service, Innovation and Sustainable Development, 5*(5). https://doi.org/10.33168/SISD.2024.0106

Karki, D., Dahal, R. K., Devkota, N., & Bhattarai, U. (2024). Investors' intrinsic motives and decision-making in the stock market. *Intellectual Economics, 18*(1). https://doi.org/10.13165/IE-24-18-1-03

Karki, D., & Khadka, P. B. (2024). Momentum investment strategies across time and trends: A review and preview. *Nepal Journal of Multidisciplinary Research, 7*(1), 62–83. https://doi.org/10.3126/njmr.v7i1.65249

Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: Exploring the role of in-branch efforts. *Journal of Financial Services Marketing, 26*(2), 107–121. https://doi.org/10.1057/s41264-020-00082-w

Kithandi, C. K., & Kithandi, D. K. (2024). *Effect of digital marketing strategies on the customer engagement in micro, small, and medium enterprises in Nairobi Country, Kenya. 11*(4), 1–15. https://doi.org/10.5281/ZENODO.14009140

Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making – a systematic literature review. *Qualitative Research in Financial Markets, 7*(1), 88–108. https://doi.org/10.1108/QRFM-07-2014-0022

Lusardi, A., Michaud, P.-C., & Mitchell, O. S. (2017). Optimal financial knowledge and wealth inequality. *Journal of Political Economy, 125*(2), 431–477. https://doi.org/10.1086/690950

Lusardi, A., & Mitchell, O. S. (2017). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. *Quarterly Journal of Finance, 07*(03), 1750008. https://doi.org/10.1142/S2010139217500082

Migozzi, J. (2026). Scoring high, paying up, gatting in: Middle-class Formation and Asset Inequalities under Digital Capitalism in South Africa. *International Journal of Urban and Regional Research, 50*(2), 410–429. https://doi.org/10.1111/1468-2427.70004

Nunnally, J. C. (1978). *Psychometric Theory* (2d ed). McGraw-Hill.

Paneru, B. P. (2023). Stock market efficiency and factors influencing Nepalese investment decisions. *Open Journal of Business and Management, 11*(06), 3152–3193. https://doi.org/10.4236/ojbm.2023.116173

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40.

Peter, J. P., & Donnelly, J. H. (2009). *Marketing management: Knowledge and skills* (9. ed). McGraw-Hill Irwin.

Pradhan, R. S., & Upadhyay, B. D. (2006). The efficient market hypothesis and the behaviour of share prices in Nepal. *SSRN Electronic Journal*, 1–33. https://doi.org/10.2139/ssrn.1403745

Riha Parvin, S. M., & Panakaje, N. (2022). Factors influencing stock market participation: A review. *International Journal of Case Studies in Business, IT, and Education, 6*(2), 831–861. https://doi.org/10.47992/IJCSBE.2581.6942.0236

Sahi, S. K., Arora, A. P., & Dhameja, N. (2013). An exploratory inquiry into the psychological biases in financial investment behavior. *Journal of Behavioral Finance, 14*(2), 94–103. https://doi.org/10.1080/15427560.2013.790387

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students* (5th ed). Prentice Hall.

Shunmugasundaram, V., & Sinha, A. (2024). The impact of behavioral biases on investment decisions: A serial mediation analysis. *Journal of Economics, Finance and Administrative Science, 30*(59), 5–21. https://doi.org/10.1108/JEFAS-08-2023-0243

Venkatesh, V., Thong, J., Xu, X., & The Hong Kong Polytechnic University. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. *Journal of the Association for Information Systems, 17*(5), 328–376. https://doi.org/10.17705/1jais.00428

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing, 52*(3), 2–22. https://doi.org/10.1177/002224298805200302