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Impact of Perceived Risks on Investors' Usage Behaviour towards Online Trading Systems in Nepal

Pramesh Thapa Magar[1]
Puja Tamang[2]

Abstract

This study examines the impact of perceived risks on investors' usage behaviour towards Nepal's Trading Management System (TMS). It further analyses the extent to which this behaviour affects investors' satisfaction. Using a quantitative approach, data were collected from 387 TMS users through structured questionnaires, and results were analysed using Partial Least Square Structural Equation Modelling (PLS-SEM). The findings show that financial and privacy risks do not significantly affect TMS usage, Time risk has an insignificant but positive impact. However, psychological risk negatively impacts usage. Interestingly, performance risk significantly and positively affects usage behaviour, indicating that investors may perceive system-related challenges as opportunities to learn or engage more actively in trading. The study also confirms a strong positive impact of TMS usage on investor satisfaction towards TMS. This study further highlights the need for reduced system errors as it provides better user experience. Regulatory bodies could enhance cybersecurity and investor protection, while educational programs can help investors to manage psychological risks and build confidence in digital trading.

Keywords: investor behaviour, Nepal Stock Exchange (NEPSE), perceived risk, Trading Management System (TMS), user satisfaction

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INTRODUCTION AND OBJECTIVES

The integration of digital technologies into financial systems has transformed global investment and trading, making financial markets more accessible and efficient (Venkatesh et al., 2003). Online Trading Systems (OTS) enable individuals to trade financial assets such as stocks, bonds, and commodities in real-time, eliminating the need for traditional brokers. Technological advancements and widespread internet access have driven the increasing adoption of these platforms, lowering entry barriers and allowing people from diverse backgrounds to participate in financial markets (Grennan & Michaely, 2021). Features such as real-time market data, user-friendly interfaces, and automated trading tools have particularly

[1]Mr. Magar is an MBA Graduate from Ace Institute of Management, Pokhara University, Nepal. Email: pramesh.magar55@gmail.com.

[2]Ms. Tamang is a Manager - Research & Academic at National Banking Institute. Email: 19623_puja@kusom.edu.np.

attracted younger investors, including millennials and Gen Z, who prefer digital financial solutions.

In developed economies, trading platforms like Charles Schwab and Fidelity Investments have integrated artificial intelligence (AI) and machine learning (ML) to offer predictive analytics and personalised investment recommendations (Hajj & Hammoud, 2023). Similarly, blockchain technology has enhanced security and transparency by maintaining tamper-proof transaction records (Nakamoto, 2008). In emerging markets such as India and Brazil, platforms like Zerodha and XP Investments have promoted financial inclusion through simplified account setups and low-cost investment options (World Bank, 2023). Similarly, Nepal has also embraced digital transformation in its financial sector. The introduction of OTS has significantly improved access to financial markets. The Nepal Stock Exchange (NEPSE) launched the Trading Management System (TMS) to facilitate real-time online trading, improving market efficiency and reducing barriers for retail investors (Nepal Stock Exchange, 2023). Previously, Nepalese investors had to visit brokerage offices physically to place orders, limiting participation in stock trading. However, with TMS and other platforms like MeroShare and the Securities Trading System (STS), investors can now execute trades, monitor market trends, and manage their portfolios remotely (Budhathoki et al., 2023). As a result, the number of individual investors has grown significantly. By 2023, the number of Demat accounts in Nepal surpassed 2.8 million, compared to 1.3 million in 2019, reflecting the increasing acceptance of online trading (Nepal Stock Exchange, 2023). The number of brokers providing online trading services has also expanded, with over 95 active brokers in Nepal's digital trading space (Financialnotices, 2024). The growth of OTS in Nepal has been supported by rising internet penetration, which reached 85% by 2022 (Nepal Telecommunications Authority, 2022). Additionally, the Securities Board of Nepal (SEBON) has introduced regulatory measures, such as secure login systems and real-time trading surveillance, to enhance security (Securities Board of Nepal [SEBON], 2021).

Despite these advancements, OTS in Nepal faces several challenges that impact investor engagement and satisfaction. Since the launch of TMS in 2018, investors have encountered issues related to cybersecurity, system downtimes, and platform inefficiencies (Devkota et al., 2021; Mahat et al., 2022). Financial risks, including market losses during downturns, have weakened investor confidence, particularly during the COVID-19 pandemic (Nepal Rastra Bank [NRB], 2021). Privacy risks, such as data breaches and system issues, including delayed trade execution, are persistent concerns (Nepal Stock Exchange, 2022). Additionally, psychological stress from market volatility also affects new investors (Devkota et al., 2021). Moreover, slow internet speeds and unoptimized interfaces and regulatory inconsistencies further contribute to user dissatisfaction and reduced trust in digital trading platforms (Nepal Telecommunications Authority, 2022; Nepal Stock Exchange, 2022; Pokhrel & Sapkota, 2023).

Many still find the platforms complex and difficult to navigate (Devkota et al., 2021). Nevertheless, the adoption of TMS has grown significantly. By mid-2020, only 31,988 users were registered, but this number surged to

over 445,353 by early 2021, driven by the shift towards online trading during the COVID-19 pandemic (Investopaper, 2021; UniHome, 2021). This rapid growth in TMS adoption contrasts with the expectation that higher perceived risks reduce usage (UniHome, 2021), highlighting a gap in examining the impact of these risks on investor behaviour and satisfaction in the Nepali context.

While international studies have examined different types of perceived risks like financial, privacy, performance, psychological and time risks (D'Alessandro et al., 2012; Khan et al., 2018; Maziriri et al., 2019), Nepalese research has primarily focused on system effectiveness, and operational challenges (Devkota et al., 2021; Pokhrel & Sapkota, 2023; Vaidya, 2021). Hence, there is scarce research regarding perceived risks in online trading systems and their impact on usage behaviour and satisfaction among investors. Several studies have reported mixed findings regarding the relationship between usage behaviour and user satisfaction. While some research (Bokhari, 2005; Lee et al., 1995; Mahmood et al., 2000) demonstrates that increased use and engagement towards online system results in a higher level of satisfaction, Udo (1992) claimed that the more an online system is used, the less effective it is found to be, which may consequently lower satisfaction. These discrepancies in empirical findings underscore the need for further research to elucidate the relationship between usage behaviour and user satisfaction, particularly in emerging digital contexts such as online trading platforms in Nepal.

Furthermore, most of the previous research works on online trading systems have assessed the impact of perceived risks on investors' adoption intention or satisfaction (e.g., Gupta & Dey, 2023; Nguyen et al., 2020; Raut & Kumar, 2024). However, there is a scarcity of studies examining the influence of perceived risks on usage behaviour and subsequently on user satisfaction. Therefore, this study addresses this gap by examining the influence of perceived risk dimensions like financial, privacy, performance, psychological, and time-related on investors' TMS usage behaviour and ultimately its influence on satisfaction within Nepal's online trading context. By understanding these relationships, the study provides insights into how perceived risks influence investor engagement with OTS platforms and identifies areas for improvement to enhance user experience and trust in Nepal's digital trading systems.

LITERATURE REVIEW

This section encompasses theoretical, conceptual frameworks and formulates hypotheses based on previous empirical research.

Theoretical Review

Perceived Risk Theory: Several theories are relevant to this study, including the Technology Acceptance Model (TAM) (Gupta & Dey, 2023; Raut & Kumar, 2024), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Kaur & Arora, 2020). However, the Perceived Risk Theory is the most relevant, as it directly examines how individuals assess uncertainties and potential negative outcomes before adopting or using technology (Bauer, 1960). Cunningham (1967) further developed the idea by defining perceived risk as a combination of uncertainty and the significance of possible negative outcomes. The theory provides a multidimensional perspective, with key types of risks including time, financial,

performance, privacy, and psychological risk (Featherman & Pavlou, 2003). These dimensions help explain the complexities of user behaviour in various decision-making contexts, including technology adoption.

This theory has been widely applied across various domains, including consumer behaviour, technology adoption, and financial decision-making (Featherman & Pavlou, 2003). For example, Maziriri et al. (2019) applied this theory to identify that perceived security, financial, and privacy risks significantly impact investor trust and behaviour in South Africa. Similarly, Gupta and Dey (2023) examined mobile stock trading systems and identified financial, privacy, and security risks as barriers to user adoption using this theory. Featherman and Pavlou (2003) extended the theory applicability to e-commerce, emphasising privacy and performance risks as major deterrents to adoption, while Khan et al. (2018) highlighted financial and performance risks as key factors affecting behavioural intentions in Pakistan using Perceived Risk Theory. These studies demonstrate the robustness of Perceived Risk Theory in explaining user hesitations towards digital financial platforms. In the context of Nepal's OTS, this theory is particularly relevant because online trading inherently involves uncertainties, including concerns about financial losses, data security breaches, and system inefficiencies, which may discourage investors from fully utilising these platforms.

Conceptual Review and Hypothesis Formulation

Perceived Time Risk and Usage Behaviour: The time risk perceived refers to the potential concern of investors regarding the time they might waste while using online stock trading platforms. This concept was defined as the perceived waste of time spent on activities such as searching for security, learning how to use the platform, and completing transactions (Khedmatgozar & Shahnazi, 2017). Featherman and Pavlou (2003) found it reduced internet banking adoption, while Currás-Pérez et al. (2013) observed its adverse effect on social platform usage. Khan et al. (2018) identified time risk as a barrier to online stock trading in Pakistan. In Nepal, Vaidya (2021) and Devkota et al. (2021) highlighted that time delays negatively impact satisfaction with Nepal Stock Exchange's Online Trading System. This leads to the hypothesis:

H_1: Perceived time risk significantly impacts investors' usage behaviour of online trading systems.

Perceived Financial Risk and Usage Behaviour: Perceived financial risk refers to the potential loss of monetary resources due to unpredictable events, which could affect investment returns or lead to financial instability (Bodie et al., 2014). Financial risk involves the possibility of a monetary loss experienced by consumers as a result of engaging with financial products, services, or transactions, including errors, fraud, or unfavourable market outcomes (Cunningham et al., 2005). Kaur and Arora (2020) found that high financial risk reduces user trust, while Featherman and Pavlou (2003) observed that users avoid technologies perceived as financially risky. Ramayah et al. (2009) demonstrated its negative effect on online stock trading adoption in Malaysia. Rouibah et al. (2009) noted financial security concerns deterred online payment usage in emerging markets. When financial risks are perceived as low, users are more likely to engage with online

trading systems. Based on this evidence, the hypothesis can be formulated as:

H_2: Perceived financial risk significantly impacts investors' usage behaviour of online trading systems.

Perceived Performance Risk and Usage Behaviour: Perceived Performance risk refers to the potential for a product or service to fail to meet expectations or deliver the intended results, leading to dissatisfaction or negative consequences (Kotler & Keller, 2016). In the context of online trading systems, performance risk involves concerns about system failures, slow performance, technical glitches, or the failure to deliver promised outcomes, which could significantly reduce user satisfaction (Forsythe & Shi, 2003). Khedmatgozar and Shahnazi (2017) found that increased performance risk reduced system reliability perceptions, discouraging adoption. Maziriri et al. (2019) noted that system failures during critical trading moments could lead to financial losses, reducing investor confidence. Similarly, Lee (2009) found that platform stability concerns lowered e-commerce adoption rates. In online trading, where reliability and efficiency are crucial, performance risk can hinder usage behaviour. Based on these findings, it is hypothesised that:

H_3: Perceived performance risk significantly impacts investors' usage behaviour of online trading systems.

Perceived Privacy Risk and Usage Behaviour: Perceived privacy risk referred to the potential for individuals' personal information to be exposed, misused, or accessed without authorisation, leading to harm such as identity theft, financial loss, or reputational damage (Smith et al., 2011). Privacy risk was defined as the likelihood and magnitude of harm that arose from the unauthorised collection, processing, or sharing of personal data, particularly in digital contexts like online trading systems (Belanger & Crossler, 2011). Featherman et al. (2010) found that ease of use and corporate credibility reduce privacy concerns, increasing adoption. Hong and Thong (2013) highlighted that strong security measures and transparent policies build trust. Kaur and Arora (2020) reported that privacy concerns affect user confidence in online trading. Maziriri et al. (2019) noted that fears of data breaches discourage online platform usage. Given the sensitivity of personal and financial data in online trading, privacy risks can deter users. Based on these findings, it is proposed that:

H_4: Perceived privacy risk significantly impacts investors' usage behaviour of online trading systems.

Perceived Psychological Risk and Usage Behaviour: Perceived psychological risk referred to the potential negative emotional outcomes, such as stress, anxiety, or regret that individuals might experience because of engaging in a transaction or using a service (Stone & Gronhaug, 1993). Psychological risk was defined as the fear of feeling dissatisfied, guilty, or regretful after deciding, particularly when the individual was uncertain about the outcome of their actions (Jacoby & Kaplan, 1972). D'Alessandro et al. (2012) found that it reduces trust and purchase intentions for high-value online products. Maziriri et al. (2019) observed that psychological risk negatively influenced investor trust in online trading. Khan et al. (2018) identified it as a factor exacerbating perceived uncertainties, discouraging adoption. Raut and Kumar

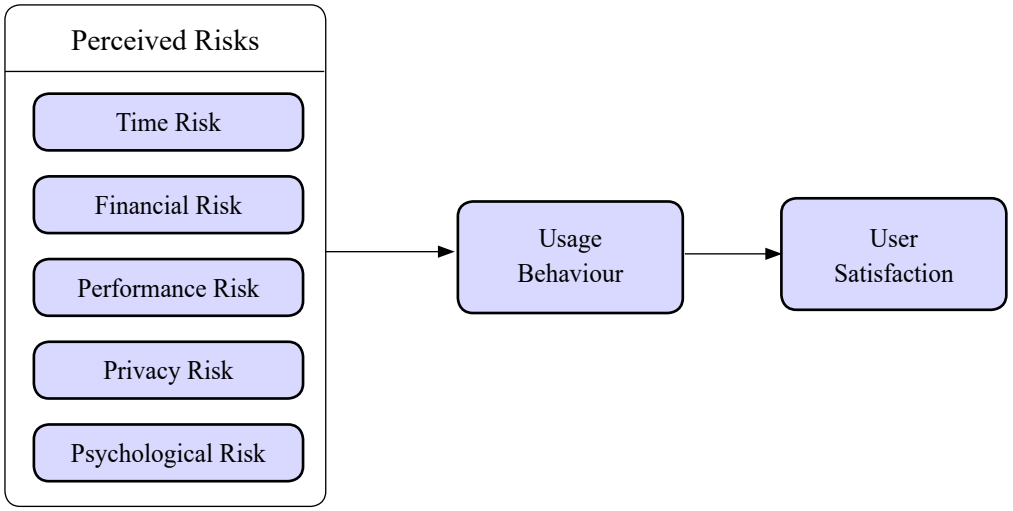

Figure 1. *Conceptual Framework*

(2024) demonstrated that psychological risk partially mediates the relationship between self-efficacy and online trading adoption, indicating that users' anxiety about technological failures or financial losses can deter engagement. Thus, based on these evidences, it is proposed that:

H_5: Perceived psychological risk significantly impacts investors' usage behaviour of online trading systems.

Usage Behaviour and User Satisfaction: Usage of an online trading system refers to an individual's behaviour towards adopting a digital platform for trading financial instruments. It is influenced by factors like perceived usefulness, ease of use, and trust in the system (Gefen & Straub, 2004; Carlos Roca et al., 2009). Usage behaviour refers to the extent to which individuals use technology, including its frequency, duration, and features utilised (Lee & Sung, 2023). On the other hand, User satisfaction is the user's overall evaluation of their experience with a system, reflecting whether the system meets or exceeds their expectations (Delone & McLean, 2003). It is defined as the degree to which a system fulfils users' expectations, providing the desired level of performance and ease of use (Lee & Sung, 2023). User satisfaction involves an emotional response to the system's performance, which is influenced by factors like system quality, information quality, and service quality (Li et al., 2002).

Gracía-Machado et al. (2012) emphasised that service quality and perceived usefulness mediate user satisfaction in trading platforms. Wu et al. (2014) demonstrated that user satisfaction strengthens usage intention, fostering continuous engagement. As investors become more comfortable with online trading, their satisfaction increases, and reinforces long-term adoption. Hence, it is proposed that:

H_6: Investors' usage behaviour significantly impacts satisfaction with online trading systems.

Conceptual Framework

This study's conceptual framework is grounded in the perceived risk theory as

well as draws from the study of Fahrianta et al. (2018). It portrays that perceived risks play a significant role in influencing investors' usage behaviour of online trading systems (OTS), which, in turn, impacts their satisfaction.

RESEARCH METHODS

Under quantitative research, this study employed an explanatory research design to examine the relationship between perceived risks, usage behaviour, and satisfaction with Nepal's online trading systems. A deductive approach was adopted, grounded in the Perceived Risk Theory (PRT), to test hypotheses using structured questionnaires. The target population comprised TMS users of NEPSE, as it is the only stock exchange in Nepal, making its digital trading ecosystem highly representative. As of 2021, there were approximately 445,353 active online users (UniHome, 2021). To ensure statistical reliability, a rule of thumb recommends ten times the number of measurement items, making 350 a suitable benchmark (Hair et al., 2014). Likewise, both judgemental and convenience sampling techniques were employed. Respondents engaged in share trading through the TMS platform were selected using purposive sampling, from which conveniently accessible participants were subsequently included in the study

Primary data was collected through a cross-sectional survey to capture real-time user experiences and perceptions incorporating both online and offline methods. Approximately 75% (288) of responses were collected through an online survey via the KoboToolbox platform, distributed through social media platforms such as Facebook, WhatsApp, Viber, Email, Messenger, and Instagram. Private groups of investors and traders also facilitated efficient distribution. Of the 292 online questionnaires, 288 were valid, yielding a response rate of 98.63%. The remaining 25% (99) of the data was gathered offline using printed questionnaires, personally administered to respondents in natural settings, particularly broker houses and financial institutions. Of the 100 distributed printed forms, 99 were successfully collected, resulting in a 99% response rate. Overall, the study obtained 392 responses, with 387 valid responses, achieving an impressive 98.47% response rate. This sample size exceeds the minimum requirement for PLS-SEM, thereby enhancing the reliability and statistical power of the findings (Kock & Hadaya, 2018). Furthermore, informed consent was obtained from participants, ensuring ethical data collection practices.

Five dimensions of perceived risk were analysed. Time risk, adapted from Featherman and Pavlou (2003), assessed concerns about the time required to learn and operate TMS effectively. Financial risk, measured using items from Pavlou (2003) and Cunningham et al. (2005), examined concerns about potential monetary losses. Performance risk, based on Forsythe and Shi (2003), captured fears related to transaction failures. Privacy risk, derived from Smith et al. (2011) and Dinev et al. (2013), assessed concerns about unauthorised access to financial data. Psychological risk, using measures from Jacoby and Kaplan (1972) and Pappas et al. (2014), evaluated anxiety and decision-making stress associated with using TMS.

In addition to risk factors, the study examined user engagement and satisfaction. Usage behaviour was measured based on engagement with TMS using established

Table 1
Measurement Model

Constructs	Factor Loading	AVE	Composite Reliability	Cronbach's Alpha
Financial Risk	0.7338	0.539	0.854	0.788
Performance Risk	0.8178	0.652	0.903	0.868
Privacy Risk	0.7614	0.581	0.874	0.823
Psychological Risk	0.7624	0.584	0.875	0.831
Time Risk	0.7462	0.558	0.863	0.803
Usage Behaviour	0.769	0.594	0.879	0.828
User Satisfaction	0.7846	0.618	0.89	0.846

Note. Survey Data (2025)

scales from Carlos Roca et al. (2009) and Pappas et al. (2014). User satisfaction was assessed with validated metrics from Gefen and Straub (2004) and Delone and McLean (2003).

Data Analysis And Discussion

It provides an overview of the respondents' characteristics, followed by preliminary analysis, which sets the foundation for the measurement model.

Preliminary Condition Analysis

The dataset was evaluated for suitability using the Kaiser-Meyer-Olkin (KMO) test (0.887) and Bartlett's Test of Sphericity ($p < 0.05$), confirming its adequacy for factor analysis. Common Method Bias (CMB) was also assessed, with no single factor explaining more than 28.754% of the variance, indicating that CMB is not a concern. These results confirm the dataset's reliability for further analysis.

Reliability Analysis

The study confirmed the reliability and validity of the measurement model using outer loadings, Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). All factor loadings exceeded 0.70, ensuring strong indicator reliability. Cronbach's Alpha and CR values were above 0.70, demonstrating good internal consistency. AVE values exceeded 0.50, confirming convergent validity.

Discriminant validity was established through the Fornell-Larcker criterion and HTMT analysis, where all constructs had distinct identities with no excessive correlations. These results indicate that the measurement model is both reliable and valid, ensuring the robustness of the study's findings.

Discriminant Validity

The assessment of discriminant validity using the Fornell and Larcker criterion confirmed that all constructs in the model (FR, PFR, PRR, PSR, TR, UB, and US) satisfied the required standards. Here, all diagonal square roots of the AVE values were greater than their corresponding off-diagonal correlation values, indicating good discriminant validity. Similarly, the discriminant validity assessment using the Heterotrait-Monotrait (HTMT) ratio of correlations confirmed that all constructs (FR, PFR, PRR, PSR, TR, UB, and US) met the required threshold criteria. Generally,

Table 2
Discriminant Validity: Fornell and Larcker Criterion

	FR	PFR	PRR	PSR	TR	UB	US
FR	0.734						
PFR	0.441	0.818					
PRR	0.54	0.611	0.762				
PSR	-0.614	-0.571	-0.662	0.764			
TR	0.61	0.370	0.539	0.565	0.747		
UB	0.184	0.276	0.246	0.314	0.196	0.771	
US	0.018	-0.066	0.012	0.049	0.027	0.628	0.786

Note. Survey Data (2025)

Table 3
Discriminant Validity- HTMT

	FR	PFR	PRR	PSR	TR	UB	US
FR							
PFR	0.547						
PRR	0.693	0.711					
PSR	0.792	0.656	0.805				
TR	0.78	0.451	0.671	0.721			
UB	0.233	0.316	0.292	0.336	0.241		
US	0.066	0.108	0.122	0.138	0.083	0.733	

discriminant validity is established if HTMT values remain below 0.85.

This study analysed 387 respondents who used the TMS online trading system, representing diverse demographic groups. The majority (63.57%) were male, while 36.43% were female. Most respondents (52.71%) were aged 20–30, followed by 31.78% in the 31–40 age group, with fewer older participants. Education levels were high, with 46.77% holding a bachelor's degree and 34.88% a master's degree or higher. In terms of occupation, 45.74% worked in the private sector, 25.06% were self-employed, and 22.74% were students. Monthly income varied, with 32.04% earning between 25,000–50,000 and 24.03% between 50,001–75,000. Nearly half (48.84%) had used TMS for over three years, while 33.07% had one to three years of experience. Trading frequency also varied, with 37.73% using TMS regularly, 27.91% often, 22.22% occasionally, and 12.14% rarely, indicating that most respondents were actively involved in online trading.

The key challenges users face in the TMS online trading system include system downtime (69.51%), transaction delays (44.70%), and concerns about manipulated market volatility (45.74%). A lack of information transparency (35.66%) and system errors (21.45%) further impact user

Table 4
Demographic Profile Analysis

Demographic Variables		Frequency	Percentage (%)
Gender	Male	246	63.57%
	Female	141	36.43%
Age	20-30	204	52.71%
	31-40	123	31.78%
	41-50	54	13.95%
	51-60	6	1.55%
Level of education	No formal Education	13	3.36%
	Up to SLC/SEE	12	3.10%
	Intermediate	45	11.63%
	Bachelor's	181	46.77%
	Master's and above	136	35.14%
Occupation	Student	88	22.74%
	Private Job	177	45.74%
	Government Job	21	5.43%
	Self Employed	98	25.32%
	Others	3	0.77%
Monthly income level	Less than 25,000	99	25.58%
	25,000–50,000	124	32.04%
	50,001–75,000	93	24.03%
	75,001–100,000	36	9.30%
	Above 100,000	35	9.04%
TMS usage duration	Less than 6 months	32	8.27%
	6 months to less than a year	38	9.82%
	1–3 years	128	33.07%
	More than 3 years	189	48.84%
Frequency of TMS usage	Regularly	146	37.73%
	Often	108	27.91%
	Occasionally	86	22.22%
	Rarely	47	12.14%

Note. Survey Data (2025)

experience. Additionally, cybersecurity threats, such as hacking and phishing, were reported by 14.47% of respondents. These issues highlight the need for improvements in system reliability, transaction efficiency, market transparency, and security.

Structural Model Analysis

Collinearity analysis using the Variance Inflation Factor (VIF) showed no significant collinearity issues, as all values were below 3, indicating a well-conditioned model. The Coefficient of Determination (R^2) revealed

Table 5
Problems Faced While Using TMS

Problems faced while using TMS	Respondents	Percentage
System Downtime/Technical Glitches	269	69.51%
Transaction delay	173	44.70%
Incorrect Transactions/Errors	83	21.45%
Lack of Information Transparency	138	35.66%
Manipulated Market Volatility	177	45.74%
Cybersecurity Threats (e.g., hacking, phishing)	56	14.47%

Note: Survey Data (2025)

that the model explains 11.4% of variance in usage behaviour (UB) and 39.6% in user satisfaction (US), suggesting weak to moderate explanatory power. Effect size (f^2) analysis indicated that UB has a strong influence on US (0.655), while other predictors had small or negligible effects. Predictive relevance (Q^2) showed moderate predictive ability for UB (0.092) but poor predictive power for US (-0.059), suggesting limitations in forecasting user satisfaction.

The structural path analysis examined the relationships between various factors affecting the use of the Trading Management System (TMS) in Nepal. The results showed that financial risk (FR), perceived risk of returns (PRR), and time risk (TR) did not significantly influence usage behaviour (UB), as indicated by their low t-values and high p-values. In contrast, performance risk (PFR) had a significant positive effect on UB ($t = 2.634$, $p = 0.008$), while psychological risk (PSR) had a significant negative impact ($t = 2.963$, $p = 0.003$). The strongest relationship was between UB and user satisfaction (US), with a high t-value (20.017) and a p-value of 0.000, confirming that frequent TMS users are generally satisfied with the system.

Discussions

This study examined the impact of perceived risks on investors' use of TMS and subsequently its effect on their satisfaction. Findings indicated that financial risk does not significantly impact TMS usage, suggesting that concerns about transaction errors and unauthorised transactions do not deter investors. This result is inconsistent with past studies (Featherman & Pavlou, 2003; Kaur & Arora, 2020). It may be due to the regulatory environment in Nepal, where organisations such as merchant banks, NEPSE, the Securities Board of Nepal (SEBON), the Central Depository System and Clearing Ltd. (CDSC), Nepal Rastra Bank (NRB), and stockbrokers closely monitor transactions correcting such possible transaction errors (Sharesansar, 2019). Similarly, privacy risk does not significantly impact usage behaviour, possibly because NEPSE's security measures, such as CAPTCHA verification, provide sufficient data protection. Time risk had an insignificant but positive effect on TMS usage, meaning that while investors experience delays, they continue using the system. These findings contrast with a few prior studies (Featherman & Pavlon, 2003; Khan et al., 2018), that found that time risk as a significant barrier to the adoption of

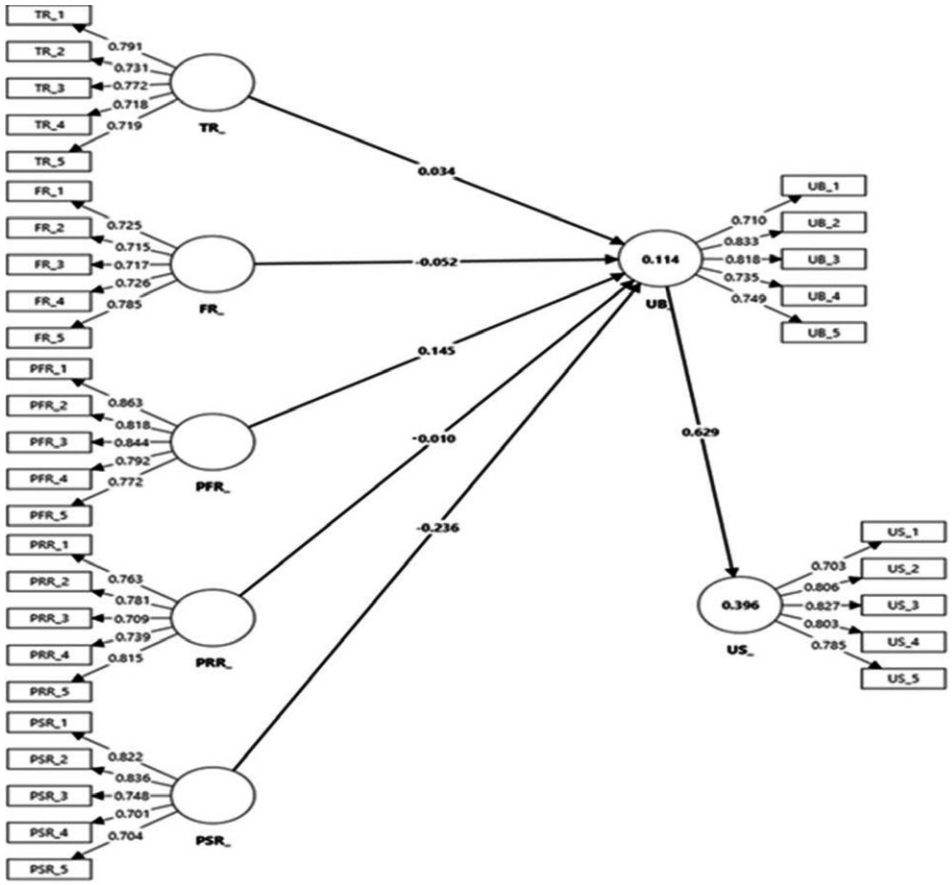

Figure 2. *Path Analysis*

online stock trading systems. The difference may be attributed due to the relatively small market size of NEPSE compared to international exchanges. Delays are a bigger concern in larger markets like NYSE and LSE whereas NEPSE's relatively small size and limited transactions reduce processing time, minimising time-related worries.

Psychological risk has a significant negative impact on TMS usage, aligning with perceived risk theory, which suggests that stress and anxiety discourage technology adoption (D'Alessandro et al., 2012; Khan et al., 2018). Perceived performance risk, however, has a significant positive impact on TMS usage. This implies that despite technical issues such as system crashes, limited features, and data accuracy concerns, Nepalese investors being active investors continue using TMS. This result contradicts previous studies (Khedmatgozar & Shahnazi, 2017; Lee, 2009; Maziriri et al., 2019) who claimed that high performance risk weakens users' trust in online platforms, leading to low engagement. The observed difference in results may be because TMS is the only available platform in Nepal for secondary stock trading (Investopaper, 2021). Lastly, the strong positive relationship between usage behaviour and satisfaction confirms that investors who use TMS are generally

Table 6
Hypothesis Testing

Structural Path	β	(M)	STDEV	t-value	P values	Empirical Decision
FR -> UB	-0.052	-0.035	0.066	0.789	0.430	Not Supported
PFR -> UB	0.145	0.143	0.055	2.634	0.008	Supported
PRR -> UB	-0.010	-0.013	0.083	0.117	0.907	Not Supported
PSR -> UB	-0.236	-0.231	0.080	2.963	0.003	Supported
TR -> UB	0.034	0.039	0.058	0.596	0.552	Not Supported
UB -> US	0.629	0.631	0.031	20.017	0.000	Supported

Note. Survey Data (2025)

satisfied with its performance, aligning with the study of (Sardjono & Savin, 2019). The similarity in the result might be due to the improved accessibility of digitalisation of stock trading in Nepal. Therefore, these findings highlight the importance of addressing psychological and performance risks to improve investor confidence in TMS.

CONCLUSION AND IMPLICATIONS

The findings of this study provide valuable insights regarding the impact of financial, privacy, time, performance, and psychological risks on investors' usage behaviour of the Trading Management System (TMS) in Nepal. The findings highlight that while some risks significantly influence user engagement, others have a minimal impact on online trading platform usage behaviour. Notably, financial and privacy risks were found to be insignificant in affecting TMS usage which indicates that investors may feel relatively secure due to Nepal's regulatory framework and existing security measures. However, to sustain this sense of security and address emerging threats, regulators could enforce stronger cybersecurity measures, streamline compliance frameworks, and introduce investor protection policies to minimise privacy and financial risks. Similarly, time-related risks did not discourage users from engaging with TMS, despite occasional transaction delays. These findings indicate that Nepal's investors prioritise system functionality over minor inconveniences in digital trading. Nevertheless, to maintain user satisfaction and ensure seamless trading experiences, platform developers could implement a more intuitive user interface and real-time support mechanisms can further encourage engagement and reduce perceived risk.

On the other hand, psychological risk played a crucial role in shaping investor behaviour. Anxiety, stress, and fear of making mistakes negatively impacted TMS engagement, reinforcing the importance of user confidence and emotional security in online trading. So, to enhance user confidence and reduce psychological barriers, regulators and platform developers could focus on improving system reliability, providing clear guidance, and offering user education programs that foster emotional assurance and trust in digital trading. Implementing a more intuitive user interface, real-time support mechanisms, and educational tools can further encourage engagement and reduce perceived risk.

Furthermore, the study confirmed that higher engagement with TMS positively influences investor satisfaction. Active users reported greater satisfaction, emphasising the significance of accessibility, efficiency, and real-time transaction capabilities in digital trading. The study provides valuable insights into investor concerns, system reliability, and areas for improvement in Nepal's trading environment. Besides, this study also contributes to the existing literature on adoption of financial technology by addressing the gap in the study of perceived risks and its impact on investor behaviour. By analysing financial, privacy, time, performance, and psychological risks within Nepal's trading environment, the study enhances the understanding of risk perception and investor satisfaction level towards online trading platforms in the evolving financial systems of Nepal. In addition, the study's findings contribute to broader discussions on risk mitigation strategies and digital financial inclusion in emerging economies.

While the study contributes significantly, certain limitations remain. This study focuses specifically on online trading systems and cannot be generalised to other digital financial platforms, as factors such as regulatory changes, technological developments, market conditions, and other perceived risk variables were not considered. Future research could examine additional behavioural and contextual factors, such as financial literacy, market confidence, and digital adoption barriers, to develop more effective risk-mitigation strategies. By addressing these aspects, financial institutions and regulatory bodies can foster investor confidence, enhance market participation, and support the long-term growth of Nepal's digital financial ecosystem.

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Conflict of interest

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