

INVESTIGATING THE ADOPTION OF ROBO-ADVISORS IN THE VIETNAM FINANCIAL SECURITIES SECTOR: PERSPECTIVES FROM LOCAL INVESTORS

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ABSTRACT

The rapid advancement of financial technology has introduced robo-advisors as a disruptive innovation in financial services. While widely adopted in Western markets, robo-advisors remain a nascent phenomenon in Vietnam's financial securities sector. This study investigates the factors influencing Vietnamese investors' adoption of robo-advisors, focusing on technological acceptance, trust, and cultural dimensions. Drawing on the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT), we propose a conceptual framework that examines the impact of perceived ease of use, perceived usefulness, trust, automated social presence (anthropomorphism), and uncertainty avoidance on investors' willingness to adopt robo-advisors. The model is empirically tested by a quantitative survey (n=300), complemented by qualitative insights from industry experts. This research contributes to the discourse on AI-driven financial services by offering theoretical insights into the intersection of financial technology and consumer behavior in an emerging market, namely Vietnam. Practically, the study provides actionable recommendations for financial institutions and policymakers in Vietnam to enhance robo-advisor adoption through targeted marketing, investor education, and regulatory clarity. More broadly, by bridging knowledge gaps in financial technology adoption, this study informs strategies for digital transformation in Vietnam's financial sector.

Keywords: Robo-advisors, Vietnam, AI Adoption, behavioral finance.

1. INTRODUCTION

Contextual background

The financial securities sector in Vietnam has transformed from a state-controlled system to a competitive, market-oriented environment, driven by the Đổi Mới reforms of the 1980s. This evolution has fostered the development of financial institutions and the adoption of advanced technologies, including robo-advisors, aligning Vietnam with global financial trends. Today, the sector comprises state-owned, joint-stock, and foreign banks, along with a growing number of fintech companies. Major players like Vietcombank, BIDV, and VietinBank dominate the banking landscape, while VNDirect and SSI Securities Corporation lead the securities market. The rise of robo-advisors, such as those from BSC-BIDV Securities, reflects a shift towards digitalization to serve the younger, tech-savvy population.

Opportunities in the sector stem from stable economic growth, a supportive government stance on financial innovation, and a young demographic favoring digital solutions. However, challenges persist, including regulatory uncertainties and cultural resistance to automated advisory services. Building trust and aligning with local preferences are crucial for the adoption of robo-advisors. The integration of AI and machine learning enhances risk assessment, portfolio management, and personalized advice, but demands robust cybersecurity and up-to-date regulations to protect consumers and ensure market stability.

Problem statement

Artificial intelligence (AI) is transforming the financial and securities sector, with robo-advisors emerging as a key trend. Robo-advisors are automated digital platforms offering financial planning services with minimal human intervention, popular for their lower fees, convenience, and efficiency, particularly among tech-savvy, younger investors (Vidya, 2022a & 2022b). Despite their widespread adoption in Western markets, robo-advisors are still relatively new in Vietnam, where only a few major local banks, such as BSC-BIDV and MBS-MBBank, have introduced them. Limited financial and IT resources contribute to slow adoption in this emerging market. While robo-advisors offer benefits, they also pose significant challenges. Cybercrime is a major concern, as hackers can exploit vulnerabilities to steal funds or manipulate financial advice (Vidya, 2023). Additionally, biased algorithms can perpetuate discrimination, offering preferential advice to specific demographics. The lack of human touch also raises issues, as AI-driven advice may not account for personal or emotional factors in financial decision-making.

Regulatory compliance is another hurdle, as AI systems must meet existing and evolving standards, which can be costly and complex. Over-reliance on AI robo-advisors can also lead to herd behavior and increased market volatility, risking systemic financial instability. In Vietnam, where the financial sector is still in the early stages of AI adoption, understanding these challenges is crucial. Addressing cyber risks, algorithmic biases, and compliance issues while balancing the need for human interaction will be key to sustainable integration of robo-advisors in the local market.

Research objectives

As we are living the world of VUCA (Volatility, Uncertainty, Complexity and Ambiguity; Vidya, 2022b), the emergence of AI, namely robo-advisors, brings both positive and negative aspects to the financial securities sector, especially in a developing context like Vietnam. There are three specific research objectives set for this study in alignment with the research problem above:

To explore the status quo, challenges and opportunities for the implementation of robo-advisors in the financial securities sector in Vietnam.

To examine key factors that drive local investors (not) to adopt robo-advisors in their investment decisions.

To assess the problem of robo-advisors by identifying key negative aspects of implementing AI robo-advisors in the financial securities sector in Vietnam.

To offer recommendations aimed at helping local securities institutions effectively deploy AI robo-advisors in reality.

Research questions

In line with the research objectives above, this study aims to address the following research questions:

RQ1: What is the status quo for implementing robo-advisors in the financial securities sector in Vietnam?

RQ2: Which are key factors determining the decision to adopt robo-advisors for financial decisions among local investors?

RQ3: What are some key problems of implementing robo-advisors in the context of Vietnamese securities market?

RQ4: How do local securities institutions implement robo-advisors effectively?

2. LITERATURE REVIEW AND HYPOTHESES

Perceived ease of use

Perceived ease of use is a key factor influencing investors' willingness to adopt robo-advisors, especially in complex financial sectors like Vietnam. When investors perceive these technologies as easy to use, concerns about usability and learning curves diminish, leading to higher adoption rates. This ease of use not only makes robo-advisors more appealing but also fosters engagement, satisfaction, and trust, enhancing long-term adoption (Gan et al., 2021). Improving user experience is vital to boosting acceptance among Vietnamese investors.

H1: Perceived ease of use positively affects the investors' willingness to adopt robo-advisors in Vietnam securities sector.

Perceived usefulness

Perceived usefulness significantly influences investors' willingness to adopt robo-advisors, particularly in emerging markets like Vietnam, where traditional financial advice can be costly or less accessible. Investors who see robo-advisors as enhancing financial decision-making are more likely to adopt them, especially as these technologies offer data-driven insights that may outperform human advisors (Alalwan et al., 2017). PU not only drives initial adoption but also fosters long-term engagement and trust, crucial for sustaining usage. Enhancing the usefulness of robo-advisors through improved features and accuracy can further boost their acceptance among Vietnamese investors.

H2: Perceived usefulness positively affects the investors' willingness to adopt robo-advisors in Vietnam securities sector.

Trust

Trust plays a crucial role in investors' willingness to adopt robo-advisors, particularly in the financial sector where trust influences every interaction. In Vietnam, where robo-advisors are relatively new, building trust is essential for adoption. Investors who perceive robo-advisors as reliable are more likely to delegate financial decision-making to them, reducing perceived risks and boosting confidence. Trust also fosters long-term engagement, as satisfied users consistently rely on the platform (Gefen & Straub, 2004). In the Vietnamese context, where financial decisions often depend on personal relationships, building both cognitive and affective trust is vital for the success of robo-advisor adoption.

H3: Trust toward robo-advisors positively affects the investors' willingness to adopt robo-advisors in Vietnam securities sector.

Automated social presence

Automated social presence, or anthropomorphism, positively influences investors' willingness to adopt robo-advisors, especially in markets like Vietnam where personal relationships are highly valued. When robo-advisors exhibit human-like, responsive, and empathetic communication, they build trust and reduce perceived risks, making them more appealing to users (Hassanein & Head, 2007). This human-like interaction not only drives initial adoption but also fosters long-term engagement and satisfaction. Enhancing automated

social presence is crucial for sustaining investor trust and usage in the competitive financial services market.

H4: Automated social presence of robo-advisors (anthropomorphism) positively affects the investors' willingness to adopt robo-advisors in Vietnam securities sector.

Uncertainty avoidance

Perceived risk significantly impacts technological acceptance, as higher perceived risk lowers the intention to adopt new technologies. In financial services, concerns about the reliability and security of robo-advisors can reduce investors' willingness to use them, despite potential benefits (Nguyen et al., 2023). This risk perception not only affects initial adoption but also ongoing usage and satisfaction. Addressing these concerns is crucial for enhancing acceptance. In Vietnam, low uncertainty avoidance, or a lower perception of risk, is expected to positively influence the adoption of robo-advisors among investors.

H5: Low uncertainty avoidance positively affects the investors' willingness to adopt robo-advisors in Vietnam securities sector.

3. METHODOLOGY

Method

This study uses a cross-sectional quantitative survey as the primary method, supplemented by interviews, to investigate robo-advisor adoption in Vietnam's financial securities sector. This approach captures attitudes and behaviors at a specific point in time, allowing the examination of relationships between variables like perceived usefulness, ease of use, and adoption rate. The survey targets at least 300 respondents, enabling the use of multiple regression analysis to validate research hypotheses above.

Population

The study targets local investors in Vietnam's financial and securities sector, including both adopters and non-adopters of robo-advisors. The diverse population covers varying demographics such as age, profession, investment experience, and technological proficiency, providing insights into the factors influencing adoption and acceptance.

Sampling technique

The study employs purposive sampling to select participants who actively use financial services, are considering robo-advisor adoption, or are stakeholders in the fintech sector. This non-probability method ensures that the sample includes individuals who can offer valuable insights based on their experiences.

Data collection

Data is collected through an online survey using Qualtrics, chosen for its functionality and efficiency in reaching a geographically dispersed population. The survey includes structured questions with Likert scales and demographic inquiries, ensuring comprehensive and reliable data collection. The data will be analyzed with SPSS.

4. EXPECTED OUTCOMES

This study provides valuable insights for stakeholders in Vietnam's financial and securities sectors.

+ For practitioners: Local finance and securities firms can leverage the findings to develop robo-advisor platforms that prioritize usability, trustworthiness, and personalized service, enhancing customer satisfaction and adoption rates. Addressing barriers to adoption will help craft effective marketing and educational campaigns to build trust.

+ For policymakers: The study offers evidence-based recommendations for developing regulations and standards in the fintech sector. Understanding investor concerns will enable policymakers to foster innovation while ensuring consumer protection, promoting a competitive and sustainable financial landscape.

+ For investors: The study clarifies the benefits and risks of robo-advisors, helping local investors make informed decisions. This is crucial in Vietnam, where misconceptions about robo-advisors may hinder adoption.

Theoretically, this study is among the first to examine robo-advisor adoption in Vietnam, offering insights into an Asian emerging market context compared to existing research focused on developed Western markets. By using a mixed-method approach, the study provides a comprehensive understanding of adoption factors.

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