Möjligheter och begränsningar med robotrådgivning

Fondforum 19 november 2025

Fondbolagens förening

SWEDISH INVESTMENT FUND ASSOCIATION

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Robo-Financial Advisors: Trust, Acceptance, and Culture

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Associate Editor, Financial Services Review (FSR)

I aim to collaborate with entrepreneurs, researchers, government agencies, international organizations, and non-profit institutions to develop FinTech solutions that ***improve people's lives and enhance their opportunities for a better future****.*

Robo-Financial Advisors

Photo by Patrick Tomasso on Unsplash

Trust

Photo by Austin Distel on Unsplash

Acceptance

Photo by John Schnobrich on Unsplash

Culture

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FinTech

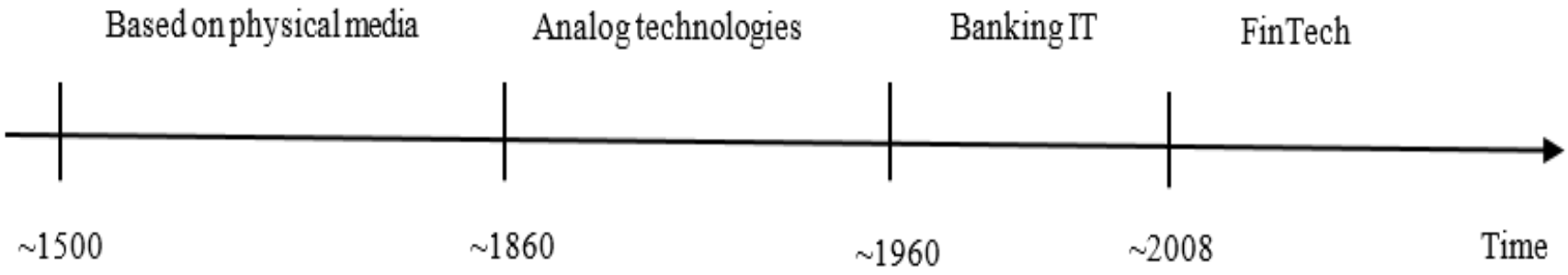

Figure 1: Evolution of financial technologies (Alt et al., 2018, p. 236)

Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. Electronic Markets, 28(3), 235-243

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Lund University Historical Museum, Sweden.

Beirut national museum, Lebanon.

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Analog computer

Website Name: Encyclopædia Britannica
Publisher: Encyclopædia Britannica
Url: https://www.britannica.com/technology/analog-computer#/media/1/22416/127313
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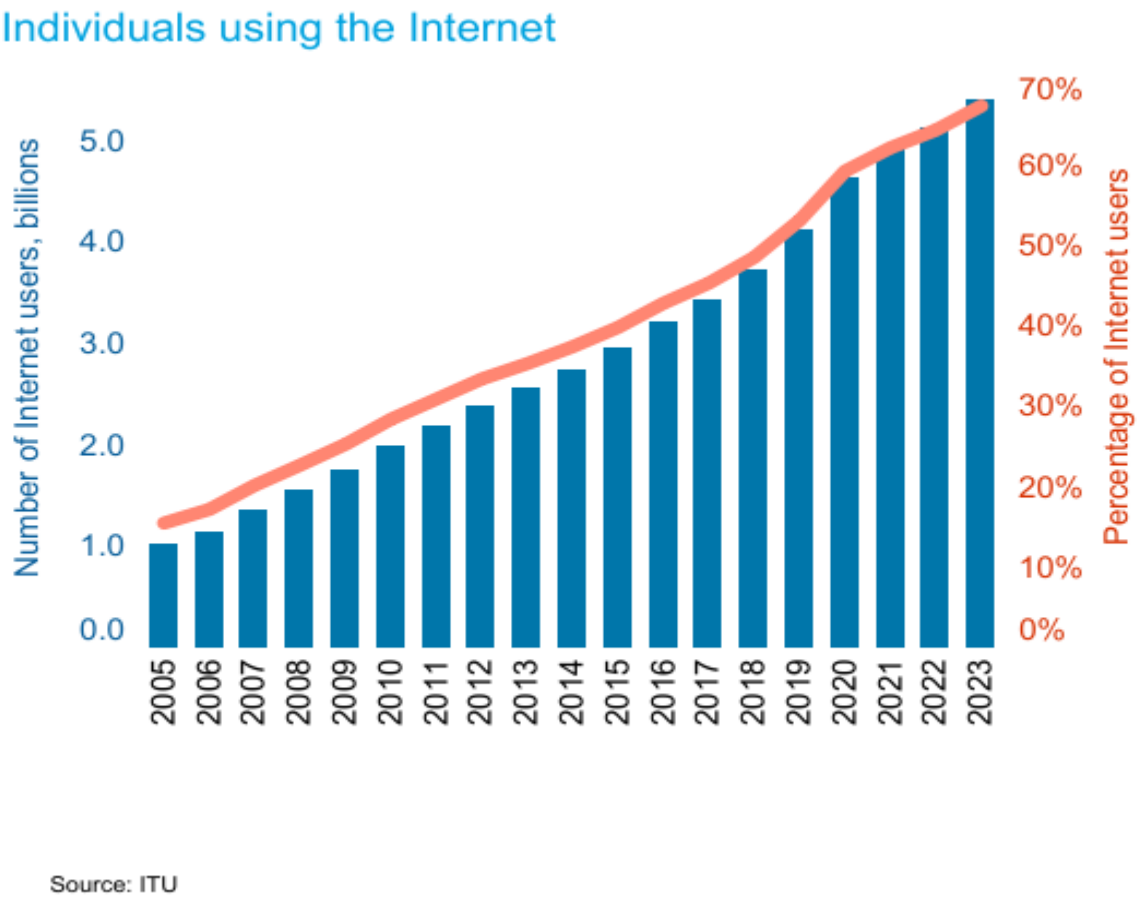
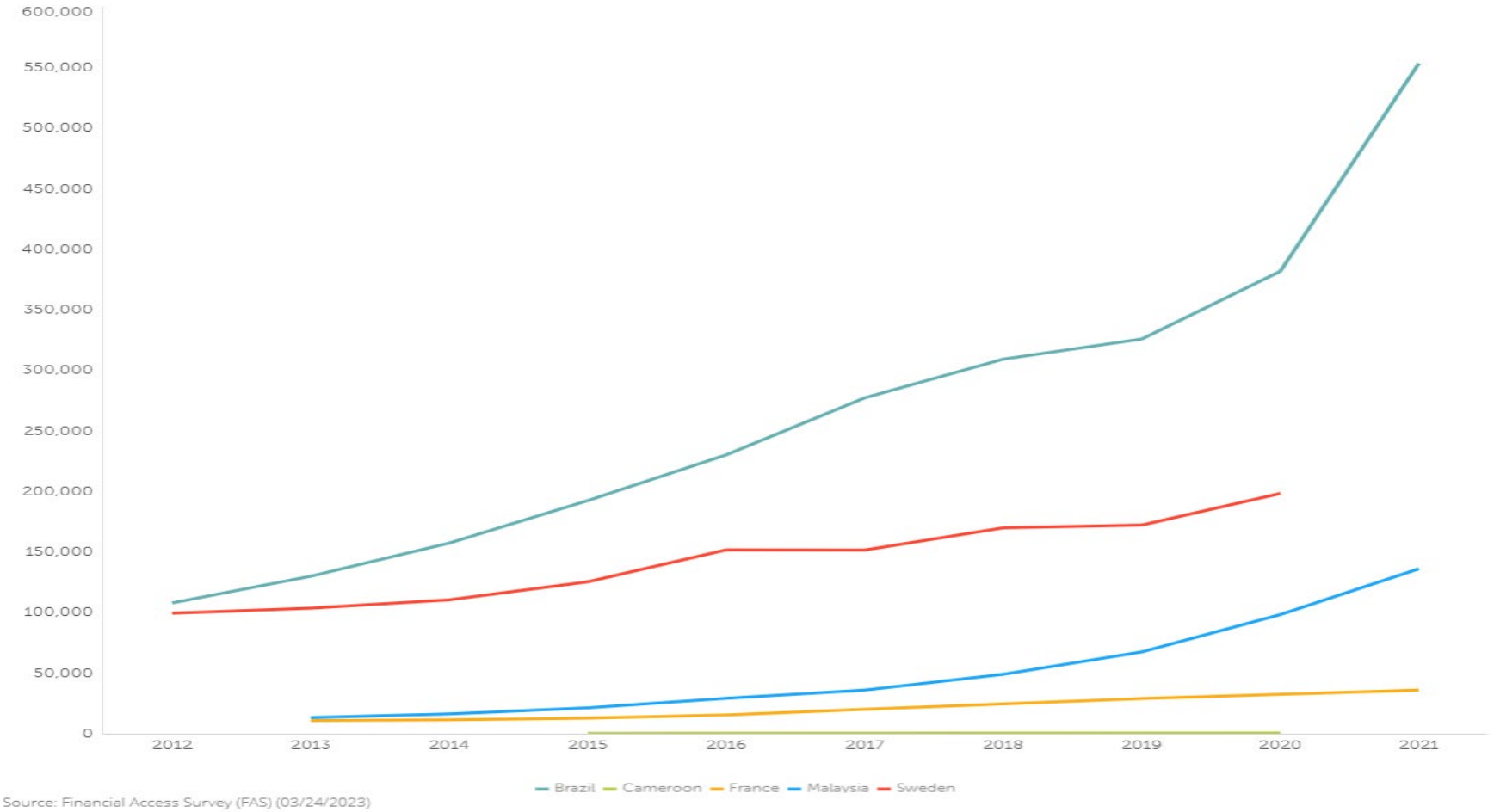
ATM machines

Photo by Andrew Valdivia on Unsplash



Source: International Telecommunication Union, https://www.itu.int/

Financial Access Survey



Source: Financial Access Survey (FAS) (03/24/2023)
Retrieved: 4/6/2023 6:50 AM from https://data.imf.org:443

Figure : Number of mobile and internet banking transactions (during the reference year) 100,000 adults

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Robo-Financial Advisors

Vad är en robotrådgivare?

Kärt barn har många namn, är det någon skillnad på en fondrobot, robotrådgivare och sparrobot?

Hur fungerar en robotrådgivare?

Behöver du hjälp?

Ställ din fråga nedan för att få svar.

Berätta vad du letar efter

Personligt Business

Om robo-advisors

Vad är en robo-advisor?

Robo-Advisor är ett verktyg som använder algoritmer för att förvalta din investeringsportfölj. Vi erbjuder portföljförvaltning och skapar anpassade portföljer baserat på varje kunds individuella investeringsmål och risktolerans.

Hur fungerar det?

Robo-Advisor fördelar pengar mellan modellportföljer som skapats av proffs. Även om det är ett halvautomatiskt verktyg övervakar vi det själva för att säkerställa att allt fungerar som förväntat för Revoluts kunder.

Läs villkoren för mer information.

Fördelar med att använda Robo-Advisor

Fördelar med att använda Robo-Advisor:

- Bekvämlighet
- Anpassningar
- Automatisering
- Tillgänglighet

Läs vanliga frågor och svar för att ta reda på mer.

What is a robo-advisor?

SUMMARY

Robo-advisors reduce wasted time and guesswork with investing. Learn how they work and who they serve best.

Investing strategies | Choosing advice | Robo-advisors | Article | Page

Whether you're new to investing or have some experience, it's common to look for help when choosing investments. One option that's gained popularity in recent years is the robo-advisor—an online platform that manages your investments automatically. In other words, it's financial advice that comes from an algorithm instead of a person, and it can take a lot of the time, guesswork, and stress out of managing your portfolio.

How does a robo-advisor work?

When you first enroll in a robo-advisor, it will ask for basic information about your goals, risk tolerance, and the length of time you want to stay invested. From there, the technology takes over to suggest a diversified portfolio. Then it automatically invests the money for you based on the information you provided.

Typically, a robo-advisor continues to manage your investments over time and rebalances your portfolio periodically to make sure your asset mix stays on track. If you change your goals, it will adjust your holdings to keep you on target, and it will rebalance your portfolio if it drifts from the recommended allocation.

Save and Invest
Invest For Your Goals
How Stock Markets Work
Investment Products
What is Risk?
Role of the SEC
Glossary

Robo-Adviser

The term "robo-adviser" generally refers to an automated digital investment advisory program. In most cases, the robo-adviser collects information regarding your financial goals, investment horizon, income and other assets, and risk tolerance by asking you to complete an online questionnaire. Based on that information, it creates and manages an investment portfolio for you. Robo-advisers often seek to offer investment advice for lower costs and fees than traditional advisory programs, and in some cases require lower account minimums than traditional investment advisers. The services provided, approaches to investing, and features of robo-advisers vary widely.

Additional Information

Investor Bulletin: Robo-Advisers

Investor Alert: Automated Investment Tools

Press Release: SEC Staff Issues Guidance Update and Investor Bulletin on Robo-Advisers

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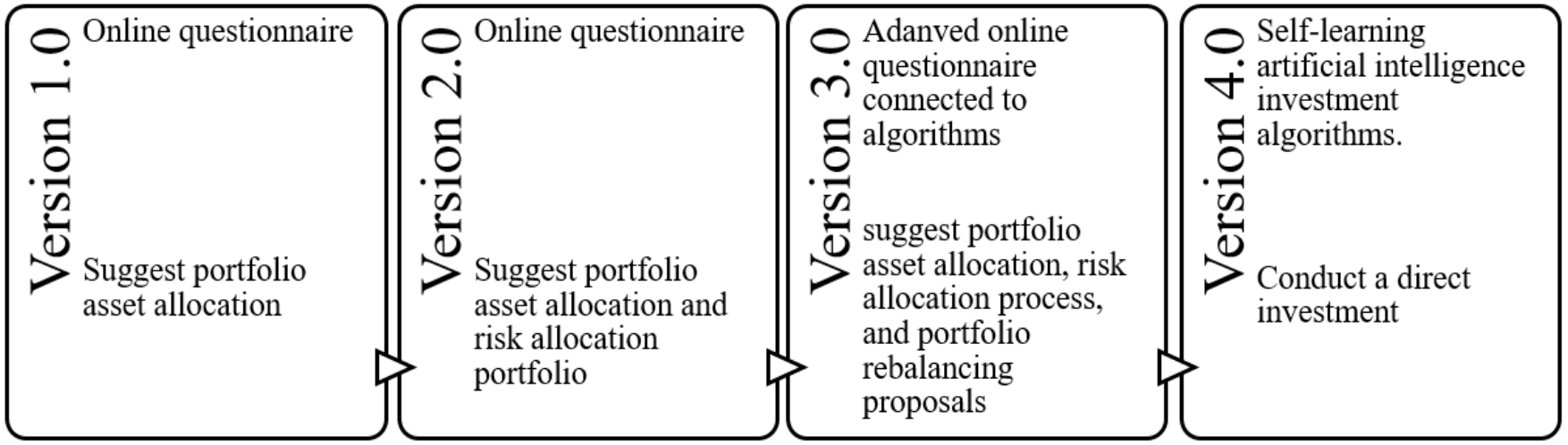
Robo-financial advisors Financial robo-advisors (FRAs) are a cutting-edge financial technology offering automated services that relies on artificial intelligence



Deloitte. (2016). The expansion of Robo-Advisory in Wealth Management. *Deloitte*, 5.

https://www2.deloitte.com/content/dam/Deloitte/de/Documents/financial-services/Deloitte-Robo-safe.pdf

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FRAs framework

- asset selection
- establishing investor profile
- portfolio optimization
- monitoring and rebalancing
- review and reporting

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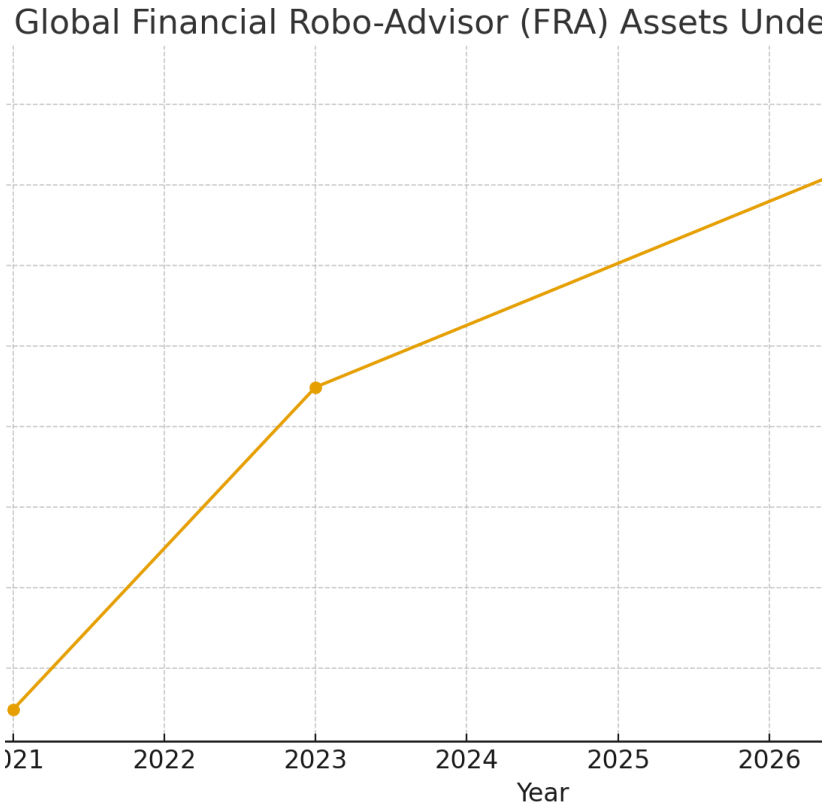
Global Growth of FRA Assets Under Management

- Worldwide, FRA Assets under Management (AuM) have increased
- from 370 billion USD in 2021
- to 1372 billion USD in 2023,
- and are expected to reach 2334 billion USD in 2028.



Statista. (2023). *Robo-Advisors - Worldwide*.

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One size does not fit all: Young retail investors' initial trust in financial robo-advisors

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ARTICLE INFO

Keywords:
Financial robo-advisors
Unified theory of acceptance and use of technology
Cultural moderators
Initial trust
Young retail investors

ABSTRACT

Financial robo-advisors (FRAs) are a cutting-edge financial technology offering automated services that relies on artificial intelligence. However, few studies have investigated how young retail investors (YRIs) build trust in FRAs. Another neglected area is whether FRAs' universal ("one-size-fit-all") model will succeed or should take account of cultural dimensions. Based on the initial trust perspective and the unified theory of acceptance and use of technology, this study develops a conceptual model of YRIs' initial trust in FRAs, testing it in two countries from different parts of the world, i.e., Malaysia and Sweden. The results indicate that trust propensity, performance expectancy, and hedonic motivation address initial trust in FRAs, which in turn drives behavioural intention to use this technology. Although most results are similar in the two countries, there are indications of cultural differences regarding what influences YRIs' initial trust in FRAs.

1. Introduction

The literature reveals that many retail investors lack experience in financial decision-making (Fecht et al., 2018), and therefore tend to search for financial advice (Bhattacharya et al., 2012). Young retail investors (YRIs) aged 18–29 years are a good example of those seeking financial advice because of their limited experience in financial decision-making (Lusardi et al., 2019). However, their limited financial resources might prevent them from hiring human advisors. To solve this dilemma, YRIs tend to search for reasonably priced artificial intelligence (AI)–based automated services such as financial robo-advisors (FRAs) (Belanche et al., 2019).

In addition to offering affordable services, FRAs' automated services allow YRIs to establish a lobby in stock markets and exert an influence on them. For example, extensive YRI use of one FRA, i.e., Robinhood, a Silicon Valley based FRA serving over 13 million retail investors, led to destabilization of the price of GameStop stock. Despite their growing popularity among YRIs, it is still unclear whether FRAs' automated advisory services are trustworthy (Cookson et al., 2020). Recently, based on a broad survey, Rossi and Utkus (2020) reported that 33 % of investors lack trust in FRAs, concluding that human contact is an important factor in building trust in the financial advice context. This shed light on the need for further research on building trust in FRAs' automated services. Similarly, previous studies have emphasized the importance of YRIs' initial trust for the enhancement of FRA technology (e.g., Bhatia et al., 2020) and identified antecedents of initial trust for further investigation (Jung et al., 2018). According to Jones and George (1998), trust develops gradually passing several phases and initial trust represents the first of these phases.

Trust propensity is seen as an antecedent of initial trust (Kaabachi et al., 2019), but its role might differ between cultural groups. Belanche et al. (2019) suggested individualism and uncertainty avoidance as salient dimensions when investigating the moderating role of culture in the acceptance of FRA use. Currently, FRA solutions have grown remarkably in countries such as Malaysia and Sweden, and figures indicate that by 2026, approximately USD 2.70 billion and USD 6 billion, respectively, will be managed by FRAs in the two countries (Statista, 2022). Since 42 % and 70 % of young Malays and Swedes, respectively, save money in financial institutions, they represent a promising market for FRAs (Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, 2018), although the degree of individualism, saving tendency, and financial literacy differ between the groups (see section 4.1).

Malaysia and Sweden are on their way to becoming cashless societies, and both have stable banking industries (Nourallah & Öhman, 2021). However, these countries seem to differ in terms of trust propensity. The World Values Survey (2014) found that only 8.5 % of respondents in Malaysia agreed that most people can be trusted, while 60.1 % in Sweden agreed that they could. Thus, to address the argument of D'Acunto & Rossi (2021) and Jung et al. (2018) regarding the lack of research on initial trust in and acceptance of FRAs, and in line with

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Available online 24 November 2022

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Trust

From ‘human to human’ to ‘human to machin

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- Investors are **used to ask questions**, add comments, share personal experiences, and even showing fear in building trust toward a human financial advisor

Photo by Charles Deluvio on Unsplash

- arises enquiries concerning how **trust** can be transmitted to machine-based environment

Photo by Campaign Creators on Unsplash

Risk

- Relying on human advisors in financial decision-making **could prone retail investors for the risk of receiving deceptive advice**

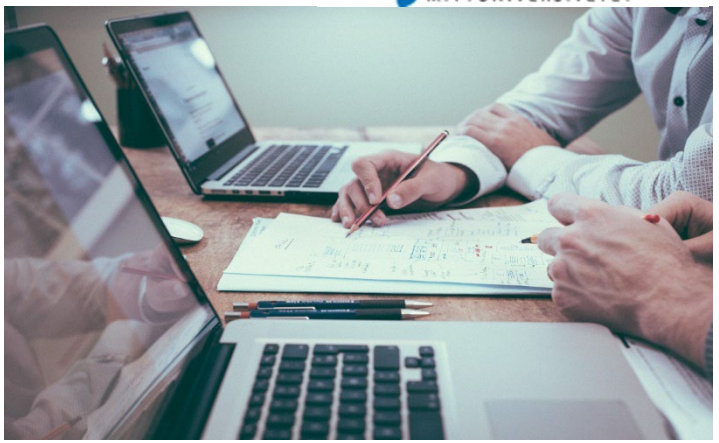
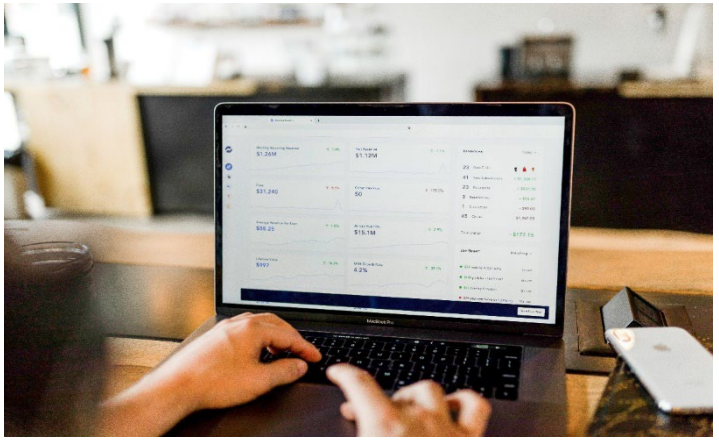


Photo by Scott Graham on Unsplash

- retail investors who fear being victimized by biased financial advice **tend to rely more on RFAs** , and that relying on **RFAs reduces the perceived biases**



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Trust, Acceptance

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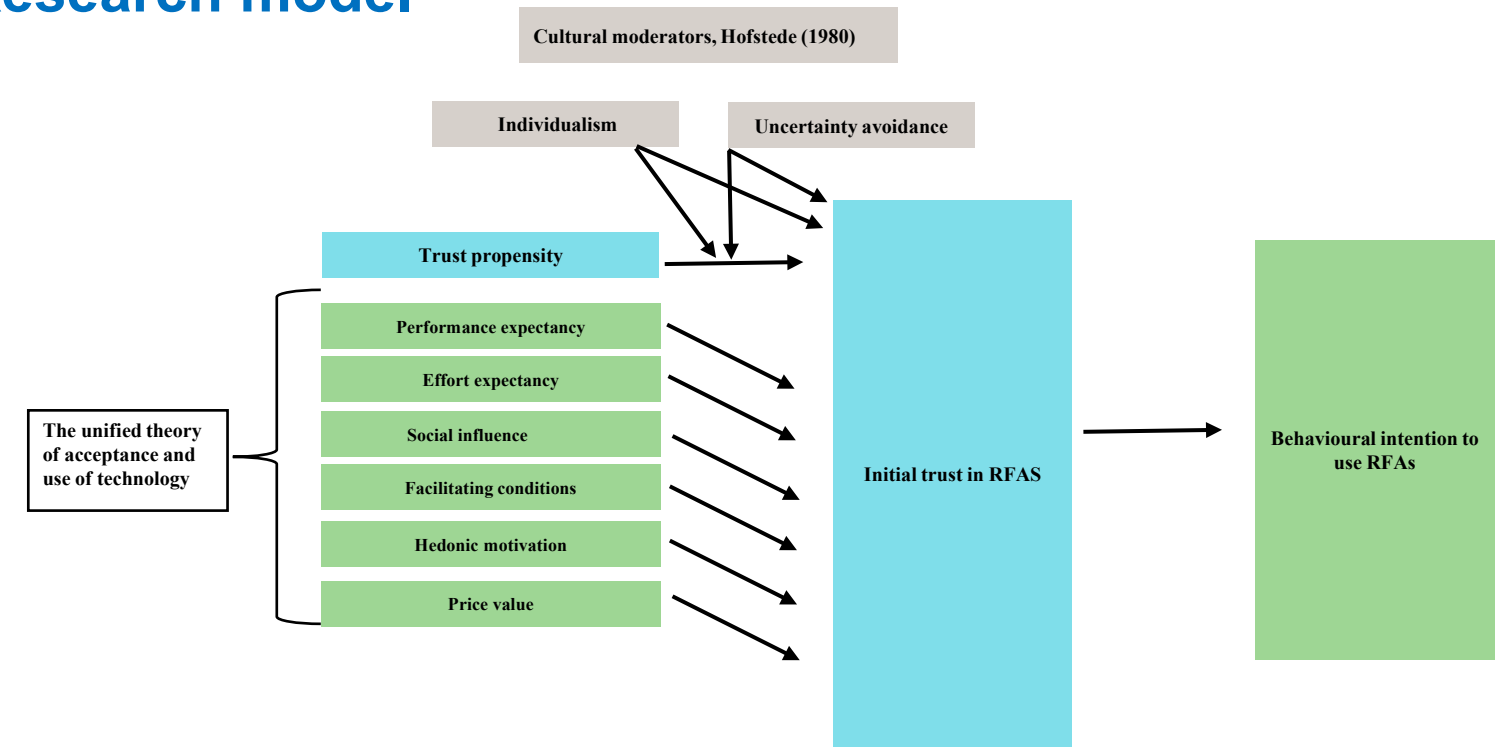
Research model



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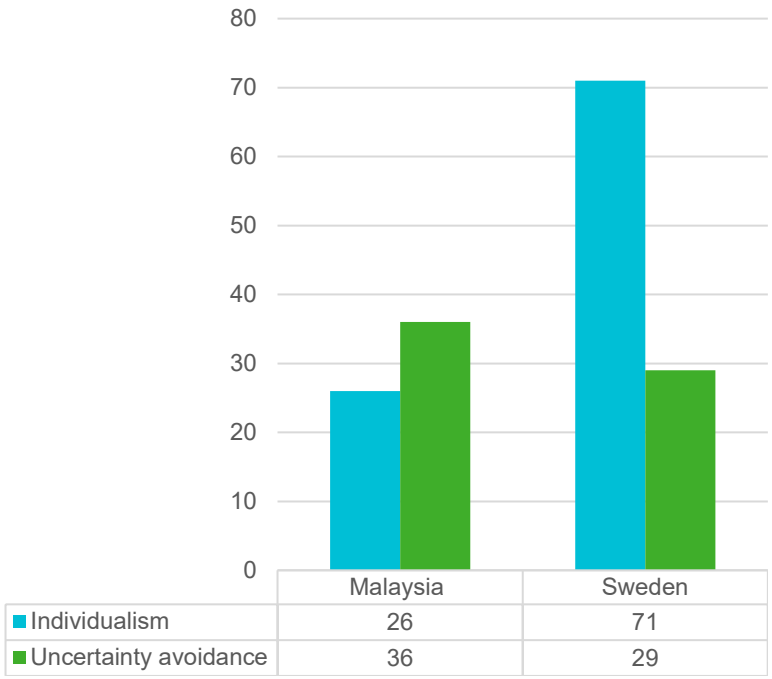
Trust, Acceptance, and Culture

Sweden and Malaysia



Hofstede Insights. (2021)

Trust your neighbourhood		
Anwars	Malaysia	Sweden
Trust completely	14.1%	29.0%
Trust: People you know personally		
Answers	Malaysia	Sweden
Trust completely	18.5%	42.6%

The world values survey (2010-2014)

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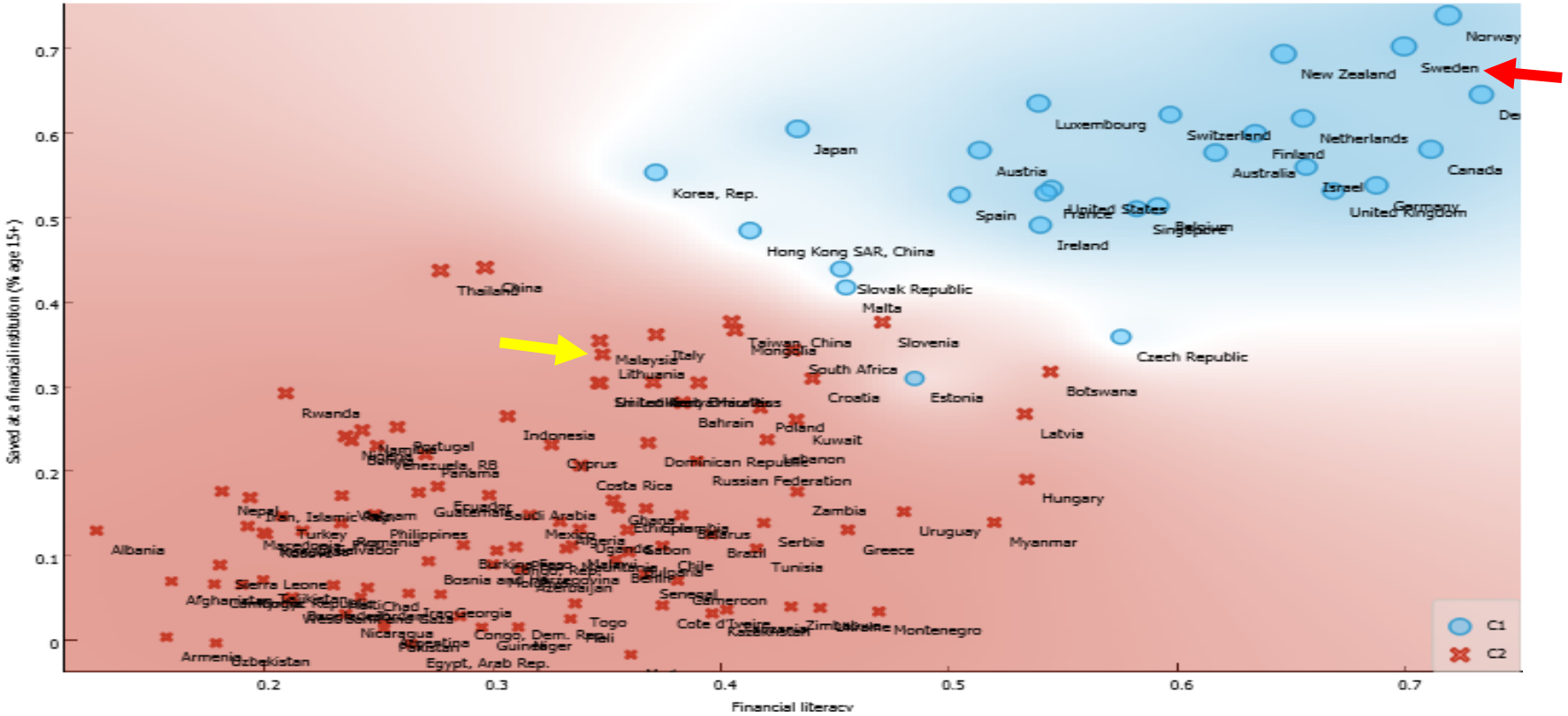
k-means clustering for saving tendency and financial literacy



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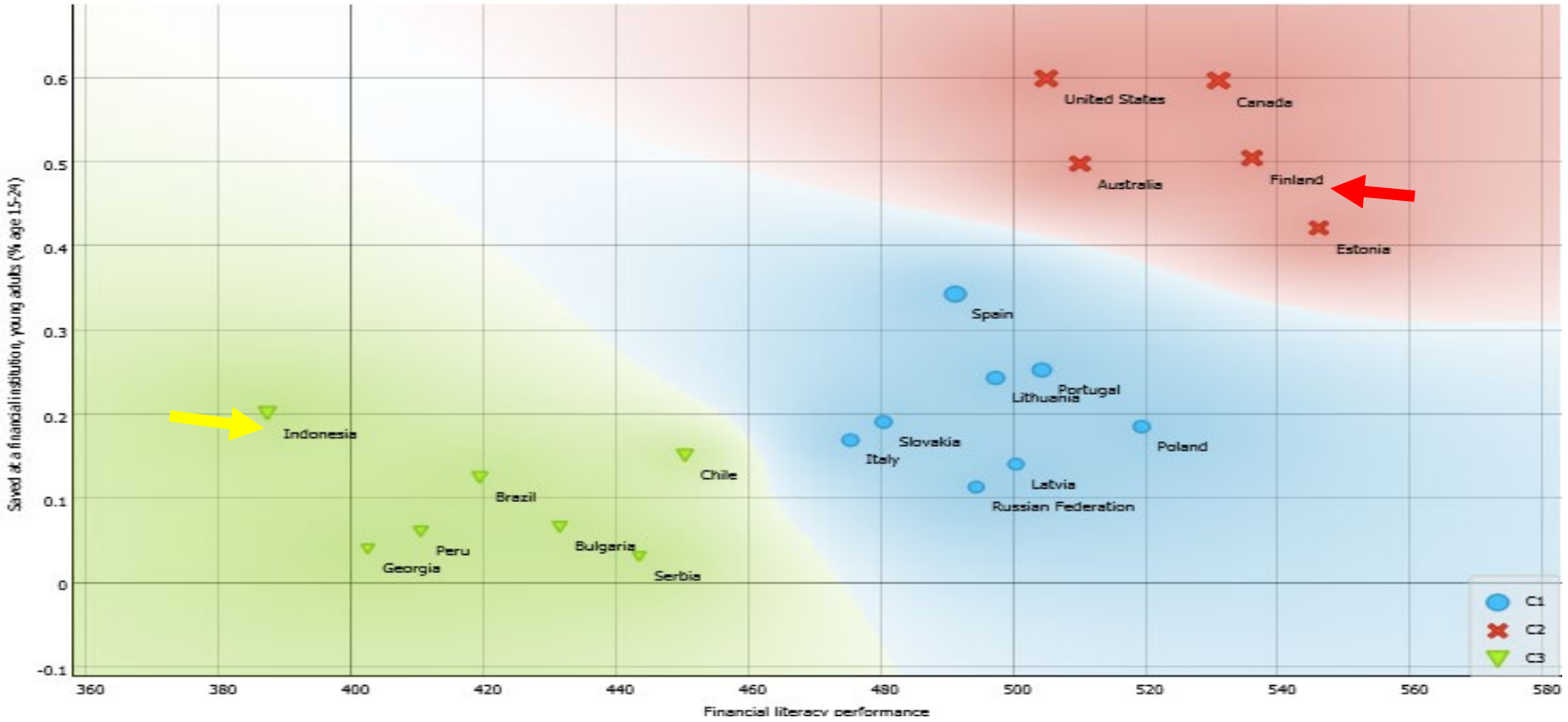
k-means: Young generation saving and financial literacy



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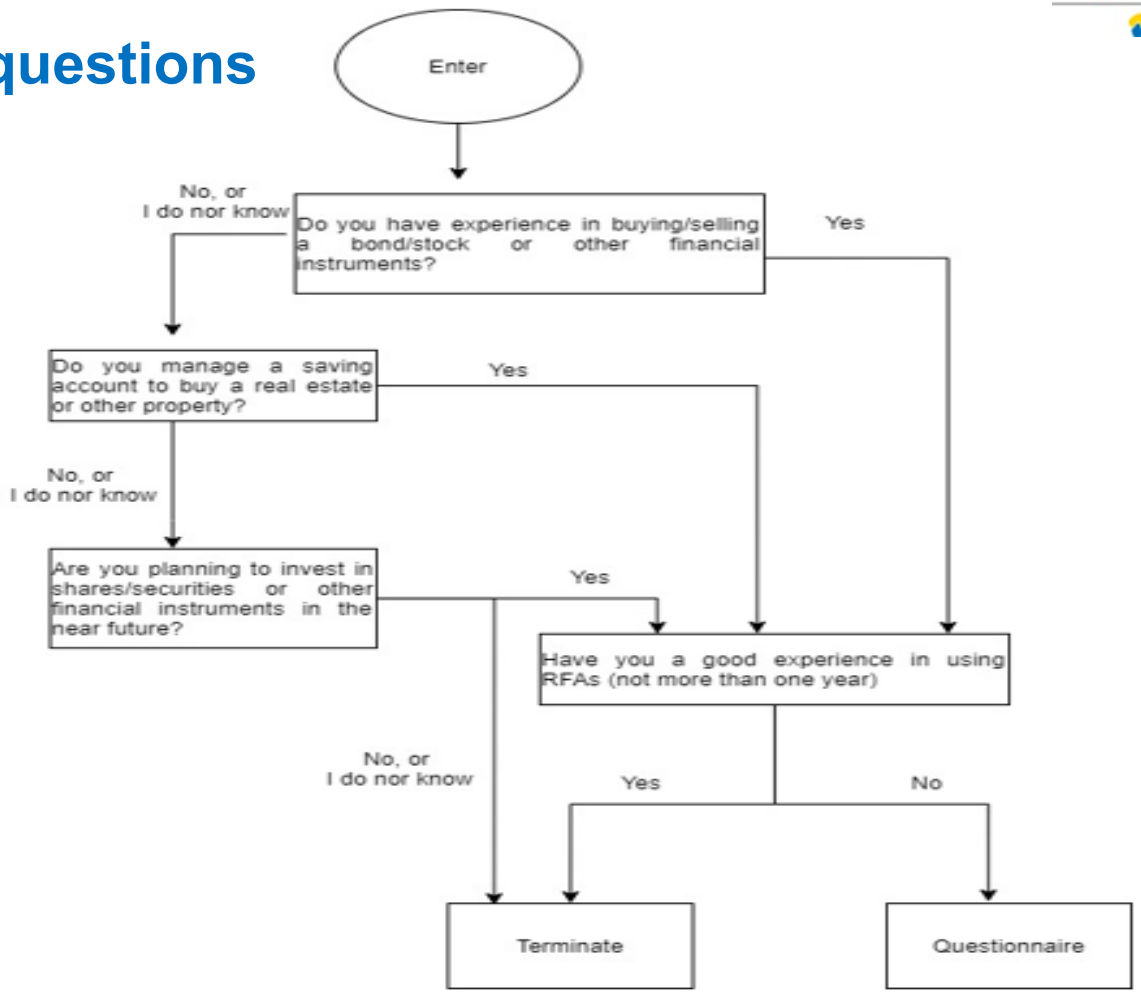
Screening questions



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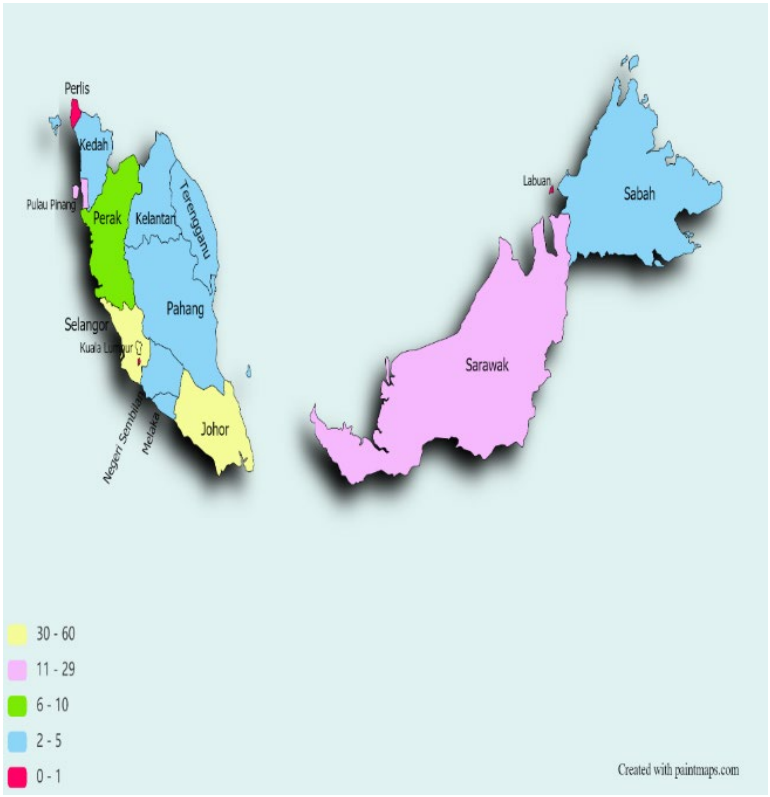
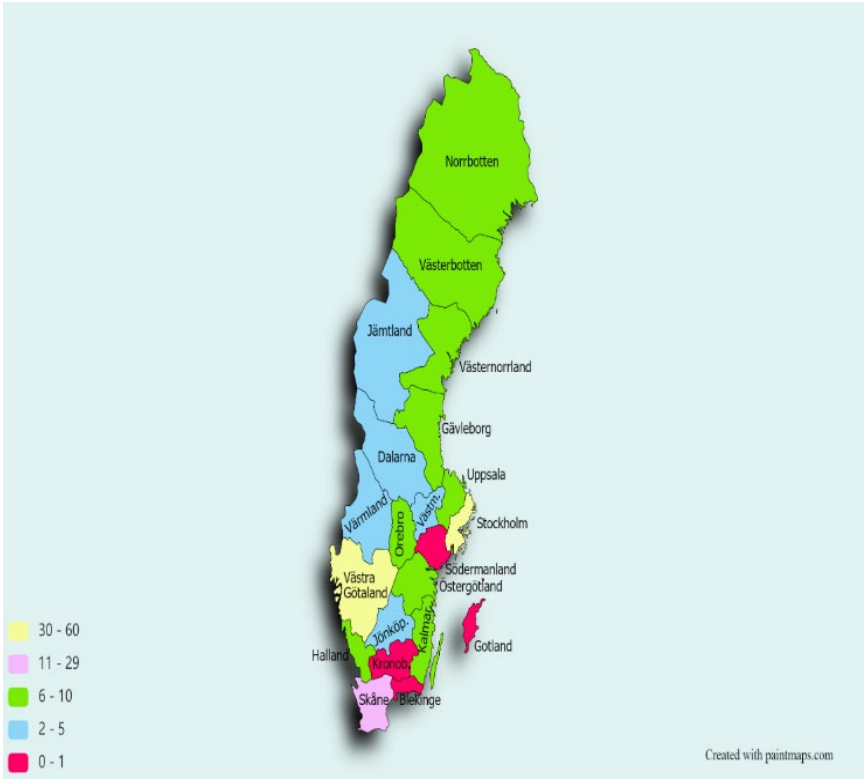
Distribution of Respondents in Malaysia and Sweden





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Hypothesis testing (Malaysia | Sweden)

	Hypothesis testing	Path coefficient	Stander Error	T-value	Resultes
H1	TrustP => InitialT	0.19|0.18	0.09|0.04	2.12|4.10	Accepted|Accepted
H2A	Individualism=> InitialT	0.01|-0.02	0.07|0.05	0.23|-0.40	Rejected|Rejected
H3A	UncertaintyA=> InitialT	0.06|0.04	0.06|0.04	1.03|1.00	Rejected|Rejected
H4	InitialT => BehaviouralIU	0.74|0.60	0.03|0.05	20.40|11.96	Accepted|Accepted
H5	PerformanceE => InitialT	0.19|0.17	0.07|0.07	2.56|2.34	Accepted|Accepted
H6	EffortE => InitialT	0.14|0.07	0.08|0.07	1.71|0.91	Accepted|Rejected
H7	SocialI=> InitialT	0.14|-0.04	0.07|0.06	1.81|-0.66	Accepted|Rejected
H8	FacilitatingC => InitialT	0.02|0.16	0.07|0.06	0.38|2.62	Rejected|Accepted
H9	HedonicM => InitialT	0.23|0.18	0.08|0.08	2.87|2.27	Accepted |Accepted
H10	PriceV => InitialT	-0.02|0.34	0.08|0.09	-0.02|3.74	Rejected |Accepted

Financial Robo-Advisors: A Comprehensive Review and Future Directions*

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Abstract

Financial Robo-Advisors (FRAs) enable households to participate in financial markets with a limited amount of money and without time or place constraints. While FRAs can help investors overcome behavioural biases, they also have disadvantages, such as relying on a limited number of inputs and lacking individualization. We conducted a systematic literature review on the nascent research on FRAs to synthesize previous research results. We identify two streams of literature: (1) asset management, which focuses on designing FRAs and improving the functioning of these machine advisors, and (2) behavioural finance, which investigates technology adoption and issues related to biased advice. Among other topics, future research should address why FRAs do not appeal to less financially literate people, who likely would benefit more than others from using FRAs.

Keywords: Financial Robo-Advisors, financial technology, investment.

JEL codes: D14, G51, O30

First Version: April 13, 2025
Latest Version: SSRN

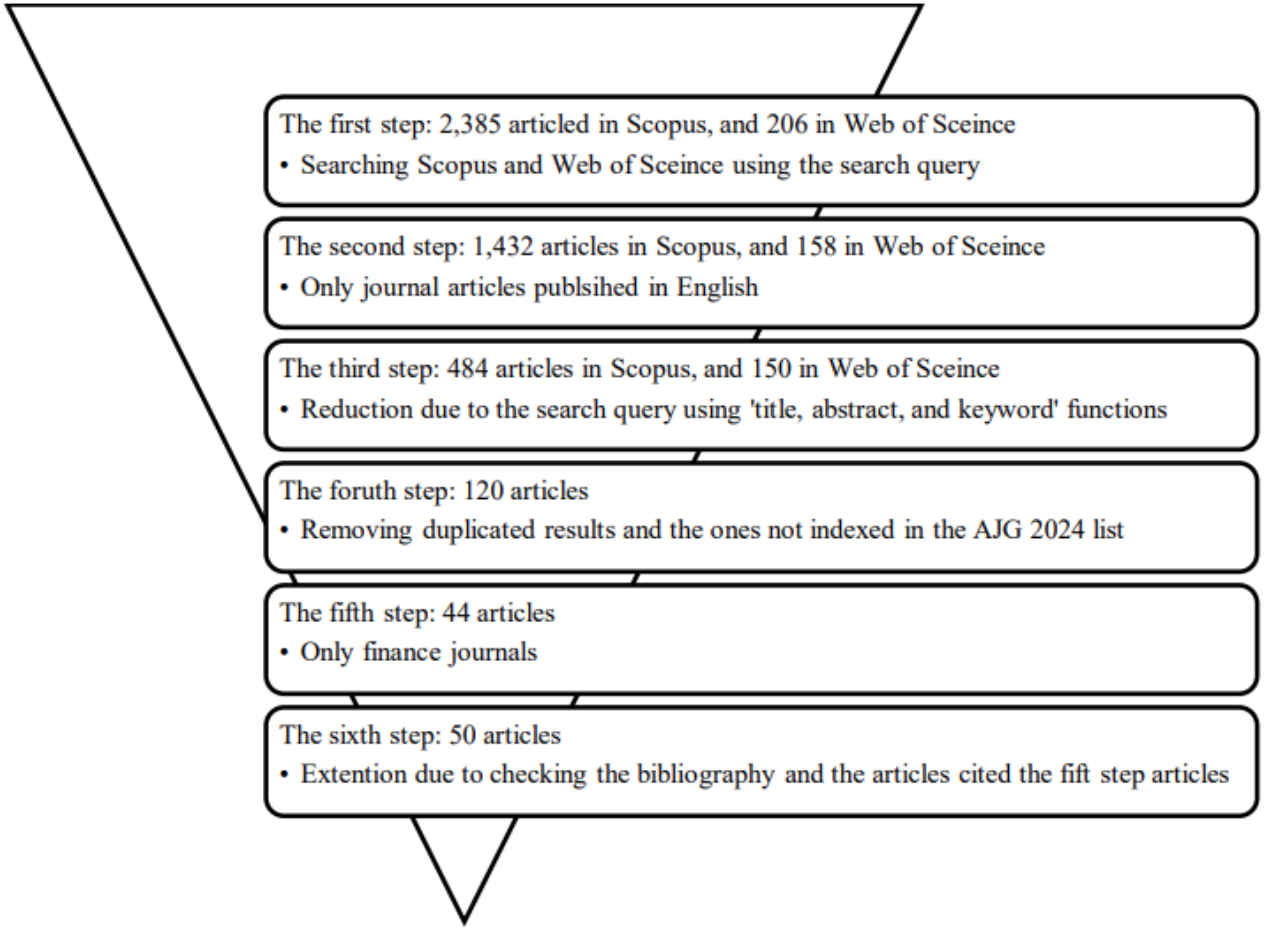

Figure 1: Process scheme of the systematic literature research

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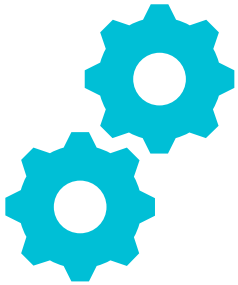
Previous research



The first area addresses the **current design** and how to improve FRA's asset management capabilities.

The second area concerns **behavioural finance issues** regarding the adoption of FRAs and investment biases.

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FRA design

FRA design illustrate underlying assumptions, **raise concerns about the methods used to suggest portfolios**, and indicate the possibility of assigning various risk profiles to the same portfolio

Studies on design improvement call for **developing more sophisticated methods to improve the security aspects** and utilize specific factors, including wealth, income, and subjective and objective risks.

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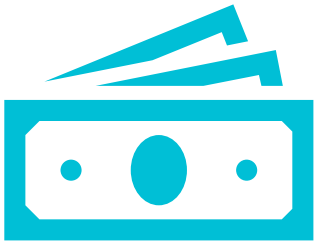
FRAs have changed the financial advisory industry



Allow households with low income and modest wealth to participate in the financial markets

Allow more individuals to plan properly for retirement and find various investment strategies to allocate their savings

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Future research

FUTURE RESEARCH COULD FURTHER EXPLORE LLMS.

HOW TO MITIGATE PRIVACY ISSUES (GDPR).

OPINIONS SEEM TO DIVERGE ON WHETHER FRAS CONTROL FOR INVESTMENT BIASES OR ENCOURAGE HEURISTICS IN MAKING INVESTMENT DECISIONS.

EXPERIMENTAL STUDIES CAN DEEPEN OUR KNOWLEDGE OF COMMON BIASES

Fondbolagens förening
SWEDISH INVESTMENT FUND ASSOCIATION

Paneldiskussion

- **Mustafa Nourallah**, lektor i företagsekonomi och verksam vid CER - Centrum för forskning om ekonomiska relationer, Mittuniversitetet
- **Oscar Björklund**, vd Lysa Fonder
- **Erik Ferm**, analytiker Pensionsmyndigheten

Moderator **Rebecca Jansson**, fondekonom Fondbolagens förening

Tack!