Major Research Project on

TRUST AND ADOPTION OF ROBO-ADVISORS VS. HUMAN ADVISORS IN PORTFOLIO MANAGEMENT:

AN ANALYTICAL STUDY

Submitted By

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23/DMBA/086

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CERTIFICATE

This certifies that, in the academic year 2024–2025, Palak Jain, Roll No. 23/DMBA/86, has partially fulfilled the requirements for the award of the Master of Business Administration (MBA) degree from Delhi School of Management, Delhi Technological University, Delhi, by submitting the major research project report titled "Trust and Adoption of Robo-Advisors vs. Human Advisors in Portfolio Management: An Analytical Study."

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DECLARATION

The Major Research Project Report, "Trust and Adoption of Robo-Advisors vs. Human Advisors in Portfolio Management: An Analytical Study," which I, Palak Jain, submitted to Delhi Technological University, is a record of my original work, I hereby declare. The requirements for the MBA in Finance and Business Analytics degree are partially met by this project report.

I further declare that no other university or institute has received this project report for the purpose of awarding a degree.

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ABSTRACT

As innovative technologies, the evolution of online behavior, and advancements in investor expectations shape our industry, the financial advisory space is undergoing fundamental changes. For many years, human advisors were the cornerstone of financial advice - providing meaningful personalized advice through human connection and emotional support. Now, with the introduction of automated platforms - otherwise known as robo-advisors - the delivery of financial advice has never been cheaper and more accessible. This leads to the question of do investors prefer technology, stay with human advisors, or decide on a hybrid model of both? With the growing interest in hybrid advisory models, the present study, "Trust and Adoption of Robo-Advisors vs. Human Advisors in Portfolio Management: An Analytical Research Study" examines the aspects of investor trust, preferences, and behaviors.

The study uses a quantitative method to assess how demographics affect trust in robo-advisors and human advisors. It focuses on factors like age, gender, income, education, experience, and investment goals. A structured questionnaire was created and shared with investors in India. A total of 190 valid responses were collected. The data was examined using cross-tabulation, chi-square tests, and correlation analysis. Eight hypotheses were tested to understand how investor characteristics relate to their trust and behaviour toward different advisory models.

The findings show clear differences in investor preferences based on demographics. Male investors preferred equities and cryptocurrencies, showing more risk-taking behavior. Female investors leaned toward safer options like fixed deposits and were more cautious. This reflects gender-based differences in risk appetite and advisory choices.

Income also influenced behavior. High-income groups were more likely to use robo-advisors, likely due to better digital skills and risk tolerance. Educated investors were more aware of and open to robo-advisory services, showing that education supports tech adoption.

Experienced investors were more comfortable with automated tools. In contrast, new investors preferred human advisors for support and reassurance.

Younger investors (under 35) trusted robo-advisors more. They were tech-savvy and liked low-cost, automated services. Older investors preferred human advisors for personal interaction and guidance. This highlights a generational gap in trust and comfort with technology.

Despite increasing robo-advisory penetration, trust is the biggest obstacle. Most of the respondents had issues with the absence of human empathy, contextual awareness, and emotional intelligence in robo-advisory systems. Investors who had long-term planning, retirement, or sophisticated portfolios as their priorities still preferred human advisers because of the all-encompassing advice and responsibility they provide. Robo-advisors were, however, valued for their reduced costs, 24/7 availability, and data-based suggestions, particularly for simple investment requirements or portfolio rebalancing.

During these discoveries, there was a strong leaning towards hybrid models—a model that combines the efficiency of robo-advisors with the human touch of financial professionals. Hybrid advisory platforms can leverage the strengths of both models: automation for data analysis, portfolio optimization, and scalability; and human advisors for relationship building, emotional support, and customized planning. Many investors, especially those entering higher-income brackets or preparing for major life events, were looking for a hybrid model that provides balanced, stable, and responsive financial advice.

The study shows that the future of financial advice is not about choosing between human or automated systems. Instead, the best approach combines both in a hybrid model. This model uses technology for tasks like investment selection and portfolio monitoring, while human advisors handle complex issues such as tax planning, strategic decisions, and coaching clients through market changes.

The hybrid model helps overcome the weaknesses of using only robo-advisors or only human advisors. Automation brings efficiency, lower costs, and 24/7 access. Human advisors add personal service, emotional support, and expert judgment for complicated needs. This combination leads to a better client experience and more tailored advice5.

Financial institutions and fintech companies can use these findings to design services for different types of clients. Younger, tech-savvy investors may prefer digital tools,

but they can still get human help for special questions or reviews. Older clients can gradually move to digital platforms while keeping strong relationships with their advisors. This flexible approach meets the needs of a wider range of investors and helps firms reach more clients, improve efficiency, and reduce costs.

In summary, the hybrid model blends technology and human expertise. It gives clients both convenience and personal attention, making financial advice more accessible and effective for everyone

The study further points to some key considerations for policymakers and industry regulators. With the growing relevance of digital advisory services, there will be a need to prioritise data privacy, transparency, algorithmic accountability, and investor education. There will be a need for clear regulatory frameworks regarding hybrid advisory practices, fiduciary obligations, and disclosure standards. Investor trust can be enhanced not only through tailored services but also through the enforcement of ethical practices, full-service customer support, and user-friendly platforms.

In conclusion, this research makes a valuable contribution to the dynamic portfolio management field by demonstrating that investor trust, preference, and adoption are highly contextual and multifaceted. The hybrid advisory model is the most viable and sustainable solution at present, and it can potentially address investor needs in all demographics and expectations. By adopting the model, the financial advisory profession can achieve broader reach, greater trust, and higher satisfaction in a more digital and complex investment environment.

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1. INTRODUCTION

Advisory services in investment have become more important recently. With fintech, robo-advisors are competing with human advisors. These platforms offer automated, data-driven advice with minimal human input. Investors want convenience, lower costs, and unbiased advice. As a result, robo-advisors are changing the landscape. However, trust, personalization, and the human connection still affect how widely these services are adopted.

This study investigates differences in trust and adoption between robo-advisors and human advisors. It assesses their effectiveness, emotional intelligence, and fit with client needs and risk profiles. Trust plays a key role in investment choices, particularly for significant funds and long-term objectives. Robo-advisors attract tech-oriented users with accessible interfaces and lower fees. In contrast, human advisors provide relational trust, emotional insight, and customized strategies, especially in unstable market conditions.

This study looks at trust and adoption differences between robo-advisors and human advisors. It evaluates their effectiveness, emotional intelligence, and how well they meet client needs and risk profiles. Trust is important in investment decisions, especially with large amounts of money and long-term goals. Robo-advisors appeal to tech-focused users with simple interfaces and lower fees. On the other hand, human advisors offer trust, emotional insight, and personalized strategies, especially during market volatility.

1.1 Background

The financial advisory field has changed significantly recently. Technology, changing investor preferences, and a demand for affordable, personalized planning have driven this transformation. In the past, financial advisors were key in guiding investors through tough choices, offering expert advice based on market insights and understanding clients' goals. Now, digital platforms and algorithm-driven tools are emerging, with robo-advisors disrupting the traditional financial advisory model.

1.1.1 What is Portfolio Management?

Portfolio management focuses on selecting and overseeing investments—such as stocks, bonds, mutual funds, and exchange-traded funds (ETFs)—to assist investors in achieving their financial goals. The primary roles in portfolio management involve determining asset allocation, managing risks, and ensuring diversification. Historically, these responsibilities were managed by human financial advisors who worked closely with clients to develop customised investment strategies. However, with the advent of robo-advisors, many of these tasks can now be automated. These robo-advisors utilise algorithms to assess an investor's risk tolerance, financial objectives, and time frame, providing a cost-effective and efficient method for managing investment portfolios.

1.1.2 The Role of Human Advisors

Human financial advisors give personal advice on taxes, retirement, and managing assets. They use their experience and intuition to guide clients, especially during market ups and downs. Unlike robo-advisors, they offer empathy and emotional support, which many clients appreciate. Trust is built through regular contact, face-to-face meetings, and proven knowledge. Clients see human advisors as more responsible, which helps build long-term trust and loyalty.

1.1.3 Rise of Robo-Advisors

Robo-advisors are digital platforms that use artificial intelligence to give investment advice. They work with little human input. These tools analyze investor data such as goals, risk level, and time horizon. Based on this, they suggest low-cost investment options like ETFs. The Robo-advisors are popular for being easy to use, affordable, and accessible. Platforms like Betterment, Wealthfront, Zerodha’s Coin, Groww, and Paytm Money are the common examples.

They are especially favored by younger investors who prefer minimal involvement. Robo-advisors offer efficiency and save time and money. However, they a lack human insight and the emotional support. During market downturns, they may not offer personalized guidance. Some investors feel not connected from these systems. Their limited flexibility and emotional intelligence can be a drawback for those seeking deeper engagement.

1.1.4 Trust in Financial Advisory Services

Trust is a very important in financial advisory. Human advisors build trust through personal relationships and shared understanding. Their expertise and regular communication help clients feel secure. Over time, this trust influences client decisions.

On the other hand, robo-advisors gain trust differently. Investors prioritize the algorithmic transparency, data security, and platform track record. The Hesitancy of investors toward robo-advisors in contrast of human advisors stems from concerns about the data privacy and the absence of human oversight in financial decision-making.

1.1.5 Hybrid Advisory Models

Many financial institutions now offer hybrid models to blend human expertise with robo-advisory services. Technology handles portfolio management and rebalancing. Human advisors provide emotional support, context, and personalized solutions. This approach targets investors seeking robo-advisor efficiency alongside the emotional intelligence and tailored guidance of human advisors.

1.1.6 The Indian Context

Many financial institutions are launching hybrid models to combine human expertise with robo-advisory services. Technology manages portfolio adjustments and rebalancing. Human advisors provide emotional support, clarity, and tailored solutions. This approach suits investors who value robo-advisor efficiency alongside the personalized insight and empathy of human advisors.

1.1.7 The Need for This Study

The financial advisory space is adapting quickly. It is now important to compare trust and acceptance of robo-advisors and human advisors. Robo-advisors are gaining popularity, but we still know little about what robo advisors builds investor trust and influences their choices. This study explores those gaps. It looks at what drives the trust, how the investors behave, and why they choose one model over the other. The research aims to give insights into how both types of advisors can adapt. It also shows how they might work together to meet the changing needs of investors.

1.2 Problem Statement

In today's technology-driven finance sector, investors face a key choice in managing their portfolios. Should they rely on traditional human advisors or the switch to algorithm-based robo-advisors? Robo-advisors are known for being low-cost, accessible, and driven by data. However, the human advisors still offer an emotional intelligence and personal support. They understand the clients' needs and provide help during market stress or financial uncertainty.

The main issue is the gap in trust and the different adoption rates. Many investors are still unsure about the fully using robo-advisors. Concerns include data privacy, lack of personal connection, limited customization, and unclear accountability.

Human advisors offer relatability and emotional support but struggle to match robo-advisors' scalability, affordability, and real-time data adaptability. This creates a complex advisory landscape. Investor choices depend on personal factors, such as emotional comfort, perceived expertise, and generational attitudes toward technology. Despite hybrid models, confusion persists about which trust factors—empathy, transparency, performance reliability, or tech-savviness—most influence adoption.

In the academic and industrial research field, investor preference research is targeted narrowly, looking at either financial performance or the embedding of technology exclusively. The greatest gap in the understanding of trust and its use in the decision-making process between robo-advisors and human advisors may not have been addressed. This study aims to bridge that gap by providing a comparative, holistic comprehension of the processes by which trust is developed, sustained, and used in the context of robo-advisors and human advisors.
This research seeks to identify and examine the determinants that affect trust and hence create a link between high technology and face-to-face interaction in portfolio management in finance.

1.3 Objectives of the Study

The main objective of this study is to examine and investigate the determinants that influence the adoption and confidence in the robo-advisors as opposed to conventional

human advisors when it comes to the portfolio management. Through the examination of different individual and demographic variables, this research will uncover important findings that can be used by financial institutions to improve their services to accommodate the needs of various investor groups of people. The following objectives will be examined in this study:

i. **To examine the relationship between monthly income and risk tolerance in investment decisions.**

One of the most crucial assumptions of this current study is that there is a high level of correlation between monthly income and one's risk-taking behavior. Through an investigation of whether or not such a correlation exists, the study aims to establish how different levels of income influence the risk-taking behavior of investors and whether it also influences the extent to which they wish to utilize robo-advisory services as opposed to human advisory services.

ii. **To investigate how education level impacts awareness of automated investment platforms.**

The study will investigate the correlation between higher education and awareness of robo-advisory services. Since education usually follows technical expertise, the study of awareness of automated investment tools by educational level will give the barriers to the use of robo-advisors.

iii. **To analyze the impact of gender on the type of investments investors primarily focus on.**

This aim aims to examine if gender affects investment choice of individuals, specifically the choice of investment product (e.g., equities, mutual funds, bonds). This will also assist in identifying if such choices exist among individuals who have faith in robo-advisors versus human advisors.

iv. **To assess the relationship between investment experience (years) and comfort level with using robo-advisors.**

The goal of this study is to investigate how years of investment experience influence an individual's willingness to embrace robo-advisors. The Experienced investors might have various expectations and some considerations of trust for automated systems versus novice investors, and this connection will be investigated in depth.

v. To explore the effect of age on trust in robo-advisors.

Age is just another critical factor that may significantly impact the adoption of technology-based financial services. The study will examine whether older investors, who may be more accustomed to traditional forms of the financial advisory, are more likely to trust human advisors over robo-advisors, and if younger generations are more inclined to adopt automated services.

vi. To identify the correlation between the primary reason for choosing a human advisor and the ideal advisory arrangement.

This objective aims to investigate the underlying motivations of choosing a human advisor (e.g., emotional support, trust, personalized service) and whether these motivations affect an investor’s preference for a hybrid model or a fully automated advisory services in advisory.

vii. To evaluate the relationship between current investment goals and the type of advisor currently used.

The study will analyze whether an investor’s specific financial goals (such as retirement planning, wealth accumulation, or tax optimization) influence their choice of advisory service, and how different types of advisors are utilized based on these goals.

viii. To determine the correlation between risk tolerance and comfort in using robo-advisors.

A key hypothesis is that the investors with higher risk tolerance are more likely to adopt robo-advisory platforms, given their focus on cost-efficiency and the algorithm-driven recommendations. This objective will evaluate whether risk tolerance correlates with the comfort in using robo-advisors.

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1.4 Scope of Study

This study explores how the Indian investors choose between robo-advisors and human advisors to manage their portfolios. It looks at the key factors such as age, gender, income, education, risk tolerance, and investment experience. The goal is to understand how much these factors influence trust and the preferences for each advisory model.

We focus on active investors. This includes retail investors who manage their own money and those who seek help from advisors. The sample will include people from different age groups, income levels, education, and experience. The rapid rise of digital finance in India makes this focus timely and relevant.

To collect data, we will use a quantitative approach. Surveys and questionnaires will measure the trust in robo-advisors, comfort with automation, and reasons for the choosing one model over the other. We will also explore how income, education, and risk levels relate to these choices. The responses will be analyzed using statistical methods to find patterns and trends.

The Data collection will take place over 2–3 months within the current year. The main aim is to capture the current investor behavior and preferences, and to set a bfor future base research.

The study only includes investors familiar with robo-advisors or human advisors. It does not cover how robo-advisor algorithms work or the regulatory framework of financial advising.

In short, the study examines how demographic and personal factors influence the choice between digital and traditional advisory services. It also shows how both models can grow together in the evolving financial landscape.

2. LITERATURE REVIEW

his review synthesizes the studies on adopting robo-advisors compared to human financial advisors for managing portfolios. It aims to find factors influencing user choices, assess theoretical models from some prior research, and uncover gaps in knowledge about user behavior in the evolving fintech sector. Wealth management is being disrupted by algorithm-driven digital platforms for financial planning called robo-advisors.

Given how the technology affects financial decisions, it is critical to comprehend the factors that drive adoption and trust. Gained value, trust, algorithm resistance, cultural and demographic influences, and usability are all examined in this review. To explain the change in investor behavior for advisory, it compares these to the conventional advisory models.

I. Sources Supporting the Adoption of Robo-Advisors

Many studies highlight **perceived value, cost-effectiveness, and personalization** as primary motivators for adopting robo-advisors.

- **Ashrafi (2023)** posits that users with higher perceived financial knowledge are more likely to appreciate the value of robo-advisors and adopt them confidently.
- **Sabir et al. (2023)** underscore that rising Assets under Management (AuM) in Europe are driven by the cost savings and convenience of robo-platforms.
- **Amelia & Amal (2024)** observe that **millennials in emerging economies** prefer robo-advisors due to personalized, digital, and low-cost solutions.
- **Au et al. (2021)** focus on the ethical appeal of sustainable robo-advisors, particularly among young investors seeking unbiased and eco-conscious advice.

These studies align with the **Technology Acceptance Model (TAM)** by **Davis (1989)**, which emphasizes perceived usefulness and ease of use as key determinants of technology adoption.

II. Sources Opposed or Critical of Robo-Advisors

Other scholars argue that robo-advisors lack the **human touch, emotional intelligence, and adaptability** needed in dynamic market environments.

- **Cheng et al. (2019)** and **Bai (2024)** suggest that the absence of human interaction creates **technology anxiety** and lowers trust, especially in high-stakes financial contexts.
- **Dietvorst et al. (2015)** introduce the concept of **algorithm aversion**, wherein users forgive human errors more easily than those made by algorithms—undermining trust in robo-advisors.
- **Aw et al. (2023)** caution against excessive anthropomorphism in robo-advisors, which can backfire by increasing perceived intrusiveness and data privacy concerns.

These views draw from **Theory of Planned Behavior (TPB)** and **Unified Theory of Acceptance and Use of Technology (UTAUT)**, which incorporate social influence and trust into technology adoption frameworks.

III. Sources Offering Alternative or Contextual Arguments

Several researchers adopt a more nuanced or context-specific view of robo-advisor adoption:

- **Hildebrand & Bergner (2021)** discuss **conversational robo-advisors**, which replicate human dialogue to reduce user discomfort and mitigate algorithm aversion.
- **Belanche et al. (2019)** and **Yi et al. (2023)** emphasize the influence of **cultural norms** and **demographic traits**, especially among tech-savvy, convenience-seeking millennials.
- **Mansoori & Bakri (2023)** highlight the role of **regulatory environments, cultural orientation, and market maturity**, especially in developing economies.

- **Go et al. (2020)** extend the conversation to adjacent fields like accounting and auditing, where AI tools face similar resistance due to workforce readiness and data security.

Additionally, **Ekaimi et al. (2024)**, in a study on teleconsultation during the pandemic, reaffirm the importance of **ease of use and trust**, demonstrating parallels across digital service sectors.

3. RESEARCH METHODOLOGY

This section dives into the research methodology we used to explore the trust and adoption dynamics between robo-advisors and human financial advisors. Our approach is crafted to examine the behavioral, psychological, and demographic factors that shape investor decisions, employing a mixed-method strategy. It details the research design, data collection techniques, sampling methods, and analytical tools we utilized to gain insights into what influences investor preferences and their trust in financial advisory systems.

3.1 Research Design

The study takes on a descriptive and exploratory research design. The descriptive part focuses on understanding the patterns of how different investor demographics adopt and trust robo-advisors compared to human advisors. Meanwhile, the exploratory side digs into the psychological and technological factors that shape user perceptions, particularly in emerging markets like India, where the use of robo-advisors is still on the rise. A quantitative approach is mainly used to collect numerical data, which helps in performing statistical analyses and drawing broader conclusions. On top of that, qualitative insights are gathered from open-ended responses to capture the more nuanced opinions and personal views on the subject.

3.2 Research Objectives

To align with the research methodology, the objectives of the study are reiterated below:

1. To examine the level of trust investors place in robo-advisors versus human advisors.
2. To identify key factors influencing the adoption of robo-advisors in portfolio management.
3. To assess how demographic variables (age, education, income, profession, etc.) affect trust and adoption behavior.
4. To understand investor expectations from financial advisory services.

3.3 Data Collection Methods

3.3.1 Primary Data

The **primary data** for this research was collected through a structured **online questionnaire** circulated among individual investors, finance professionals, students, and digitally aware citizens. The questionnaire was designed using **Google Forms**, enabling wider reach and easy data aggregation.

The survey contained both **closed-ended** (Likert scale, multiple choice) and **open-ended** questions. This hybrid format allowed for quantitative analysis and qualitative observations. The questionnaire was divided into the following sections:

- Demographic Profile
- Awareness and Usage of Robo-Advisors
- Experience with Human Financial Advisors
- Trust Perceptions (Algorithm vs. Human)
- Ease of Use and Satisfaction
- Willingness to Switch or Try New Advisory Models

3.3.2 Secondary Data

Secondary data was collected from credible academic sources, journals, industry reports, and existing research databases such as JSTOR, ResearchGate, ScienceDirect, and Google Scholar. Sources included empirical studies by authors like Aw et al. (2023), Cheng et al. (2019), Ashrafi (2023), and others. Secondary data was mainly used for literature review, identifying research gaps, and comparing findings.

3.4 Sampling Design

3.4.1 Target Population

The target population included:

- Existing investors using financial advisors (either robo or human)
- Young professionals and students considering investment options
- Finance and fintech enthusiasts
- General users of digital banking/wealth apps

3.4.2 Sampling Method

A **non-probability purposive sampling technique** was used to ensure that respondents had a basic understanding of financial services. This method was chosen due to constraints of time and accessibility, as well as the need to collect data from digitally literate participants who could provide relevant insights on the topic.

3.4.3 Sample Size

A total of **190 valid responses** were collected and analyzed for this study. The sample was diverse across gender, age, occupation, and financial literacy levels, which contributed to more representative findings despite the non-random sampling.

3.5 Research Tools and Techniques

3.5.1 Questionnaire Design

The questionnaire was developed based on existing scales and research models. For instance:

- **Technology Acceptance Model (TAM)** was used to frame questions on perceived usefulness and ease of use.
- **Trust constructs** were derived from studies on algorithmic trust, interpersonal trust, and financial behavior.
- Likert Scale (5-point) questions were used to measure agreement on statements such as:
    - "I trust algorithms to manage my money."
    - "I prefer human advice when making important financial decisions."

3.5.2 Data Analysis Tools

The collected data were organized and analyzed using **Microsoft Excel** and **SPSS (Statistical Package for the Social Sciences)**. The following analytical tools were employed:

- **Descriptive Statistics**: To summarize demographic and behavioral data.
- **Cross-tabulation**: To explore relationships between trust/adoption and demographic variables.

- **Correlation Analysis**: To examine the strength of relationships between perceived ease of use, trust, and willingness to adopt.
- **Graphical Analysis**: Bar charts and pie charts were used for visual representation.

Qualitative insights from open-ended responses were thematically analyzed to identify recurring trends or unique perspectives.

3.6 Ethical Considerations

Ethical integrity was at the heart of this study. We made sure that all research activities followed academic and ethical standards, respecting the rights and privacy of our participants throughout the data collection and analysis process.

To start, taking part in the survey was completely voluntary. We made it a point to clearly explain the nature and purpose of the study to respondents before they filled out the questionnaire. No one was pressured or offered incentives to participate. Additionally, we obtained informed consent from each participant, ensuring they understood that their responses would be used solely for academic research.

Moreover, we took great care to maintain the anonymity and confidentiality of our participants. We didn't collect any personally identifiable information—like names, phone numbers, or email addresses—during the survey. This approach helped reduce response bias and encouraged honest and open feedback from the respondents.

We also ensured that the data we collected was stored securely and used only for analysis within the scope of this project. There was no commercial use or sharing of any responses with third parties.

Lastly, we prioritized ethical transparency by clearly outlining the study's objectives and scope to all participants at the start of the survey. This not only helped us gain informed consent but also built trust and clarity about our research intentions.

3.7 Limitations of the Methodology

While the study offers insightful findings into the perceptions of investors towards robo-advisors and human financial advisors, several limitations need to be acknowledged, which may affect the generalizability and applicability of the results.

3.7.1 **Sample Size**

The study draws on a sample of 190 respondents, which, while statistically valid for exploratory research, might not fully reflect the wider investor community in India. A larger and more varied sample would strengthen the findings.

3.7.2 **Sampling Bias**

The approach of using non-probability convenience sampling, mainly through online methods, may have inadvertently left out certain groups—especially those who are not tech-savvy, rural, or elderly investors—who could have different views on financial advisory tools. This narrows the range of perspectives included.

3.7.3 **Response Bias**

Since the data was gathered through self-reported questionnaires, the results might be influenced by social desirability bias or recall bias, where respondents could exaggerate or downplay their actual behaviors or preferences. This is a typical limitation seen in survey-based research.

3.7.4 **Time Constraints**

Due to **limited time availability**, the study could not accommodate deeper qualitative methods such as interviews or focus groups, nor could it employ a **longitudinal design** to observe changes in perception over time. A more extended research period could have provided richer, multi-dimensional insights.

3.7.5 **Limited Scope of Variables**

While the study touches on important concepts like perceived value, trust, and ease of use, it overlooks other factors that could play a role, such as risk tolerance, digital literacy, and individual financial goals, all of which might influence how people adopt robo-advisors. Even with these gaps, the methodology used was quite effective in capturing a snapshot of how investors feel about robo-advisors compared to human financial advisors, laying a strong groundwork for future research in this field.

4. ANALYSIS, DISCUSSION AND RECOMMENDATIONS

4.1 Introduction to the Case

The world of financial advisory has seen some major shifts in the last ten years, largely thanks to the emergence of robo-advisors. These digital platforms use algorithms and artificial intelligence to deliver automated financial advice and manage portfolios. They're designed to provide tailored investment suggestions without needing a human touch, which makes them really appealing for investors looking for budget-friendly, easy-to-use, and efficient investment options.

That said, the rise of robo-advisors has sparked a lot of questions, especially when you stack them up against traditional, human-led advisory services. Things like trust, risk tolerance, investment goals, and even demographic factors—like age, gender, income, and education—play a big role in how investors choose their financial advisors. While robo-advisors are definitely on the rise, they haven't completely taken over the market, especially for those who value personalized advice and the expertise that only a human can provide.

This report dives into the dynamics of trust and the adoption of robo-advisors compared to human advisors in managing portfolios. It specifically looks at how these elements are shaped by different investor characteristics. By examining the connections between demographic factors and behavioral traits, the report aims to shed light on how fintech platforms, financial advisors, and investors can successfully navigate the changing landscape of investment management.

The main goal of this study is to explore how different factors—like risk tolerance, investment experience, and personal investment goals—affect people's preferences for robo-advisors compared to human advisors. This research aims to fill the gap in understanding why certain investor groups are more inclined to trust and use automated advisory services, which could ultimately benefit the financial advisory sector. To steer the research, the study examines eight hypotheses that look into various demographic and psychological elements influencing the choice between

robo-advisors and human advisors. You can find a detailed breakdown of these hypotheses in the Data Analysis section.

4.2 Data Collection (Sources and Approach)

For this research, data was primarily collected through a **structured online survey**. The survey was designed to capture both **quantitative** and **qualitative** responses from investors regarding their **preferences, experiences**, and **demographics**. This approach was chosen because it allows for easy distribution and access, while also ensuring that a wide range of responses from different investor profiles could be gathered.

The survey was distributed through several channels:

- **Social media**: Platforms like LinkedIn and Facebook were used to reach a broad audience, especially tech-savvy investors who might be more inclined to use robo-advisors.
- **Email Campaigns**: The survey was sent to individuals in financial forums, investor groups, and mailing lists to ensure a mix of people at various stages of their investment journey.
- **Financial Forums**: Websites and discussion boards dedicated to investment topics were used to target experienced investors who might have a clearer stance on their preferred advisory models.

The survey included a mix of multiple-choice questions, Likert scale items, and open-ended questions. Participants were asked to choose their preferred type of advisor—whether that be a robo-advisor, a human advisor, a hybrid model, or a self-directed approach. They also indicated their investment goals, like retirement or wealth accumulation, and rated how comfortable they felt using robo-advisors. Additionally, there were questions aimed at gathering demographic details, such as age, gender, income, education, and investment experience.

In total, we gathered 190 valid responses, which gives us a well-rounded view of individual investors with varying levels of experience and backgrounds. This data serves as the foundation for testing eight hypotheses, each crafted to explore the

significant relationships between investor characteristics and their preferences or perceptions regarding robo-advisors versus human advisors. The following section will delve into the analysis of these hypotheses using the appropriate statistical tests.

4.3 Data Analysis

We carried out a data analysis that blended descriptive statistics with inferential tests to uncover the connections between key variables. Our focus was on exploring how factors such as age, gender, education level, and risk tolerance influence investors' comfort and trust in robo-advisors compared to human advisors.

4.3.1 Descriptive Statistics:

- **Frequency distribution** was used to summarize the responses for categorical variables like **advisor type preference**, **investment goals**, and **gender**.
- **Means and standard deviations** were calculated for continuous variables such as **age** and **investment experience**.

Software Used:

The data collected via Google Forms was exported to **Microsoft Excel** and **SPSS** for cleaning and statistical analysis.

Statistical Tools Applied:

- **Chi-Square Test of Independence** – for categorical data (e.g., gender, education, investment type).
- **Correlation Analysis (Pearson/Spearman)** – for continuous or ordinal variables (e.g., risk tolerance, comfort with robo-advisors).
- **Cross-tabulation and Frequency Analysis** – to observe trends and patterns.

4.3.2 Inferential Statistical Tests:

- **Pearson Correlation Analysis**: This was used to examine the strength and direction of relationships between variables such as **risk tolerance**, **monthly income**, and **comfort with robo-advisors**.

- **Chi-Square Tests of Independence**: These tests were used to analyze whether there were significant relationships between **categorical variables** like **gender** and **investment preferences**, or **investment goals** and **advisor preferences**.

4.3.3 Hypothesis Testing and Interpretation:

Hypothesis 1:

H_0: There is no significant relationship between monthly income and risk tolerance in investments.

H_1: There is a significant relationship between monthly income and risk tolerance in investments.

To evaluate whether an individual's **monthly income** influences their **risk tolerance** in investment behaviour, a **Pearson correlation test** was conducted using the responses from 190 participants.

Table 1.1

Correlations

		3. Monthly Income (INR):	7. How would you rate your risk tolerance in investments? (Scale: Low to High)
3. Monthly Income (INR):	Pearson Correlation	1	.017
	Sig. (2-tailed)		.814
	N	190	190
7. How would you rate your risk tolerance in investments? (Scale: Low to High)	Pearson Correlation	.017	1
	Sig. (2-tailed)	.814	
	N	190	190

Source: SPSS

Interpretation:

The Pearson correlation coefficient of 0.017 suggests there's a weak positive link between monthly income and risk tolerance. But here is the catch: the p-value is 0.814, which is way above the usual cutoff of 0.05. This tells us that the result isn't statistically significant. In simpler terms, it means we do not have any solid evidence to suggest that how much money someone makes has any real impact on their willingness to take risks when it comes to investing.

Conclusion:

The hypothesis is **rejected**. The analysis indicates that a person's monthly income doesn't really have a significant impact on their risk tolerance as an investor. In simpler terms, just because someone has a higher income does not mean they are willing to take risks compared to those with lower incomes.

This discovery goes against a widely accepted notion in financial planning that suggests a person's appetite for risk grows with their disposable income. It hints those other elements—like age, financial aspirations, personality traits, or investment experience—might have a bigger influence on how someone approaches risk.

Hypothesis 2:

H_0: There is **no significant relationship** between education level and awareness of automated investment platforms.

H_1: There **is a significant relationship** between education level and awareness of automated investment platforms.

To test this hypothesis, a **Pearson correlation analysis** was performed to assess the relationship between respondents' **education level** and whether they had previously heard of **automated investment platforms (robo-advisors)**.

Table 1.2

Correlations

		4. Education Level	9. Have you heard of Automated Investment Platforms (Robo-Advisors) before?
4. Education Level	Pearson Correlation	1	.094
	Sig. (2-tailed)		.196
	N	190	190
9. Have you heard of Automated Investment Platforms (Robo-Advisors) before?	Pearson Correlation	.094	1
	Sig. (2-tailed)	.196	
	N	190	190

Source: SPSS

Interpretation:

The Pearson correlation coefficient of 0.094 suggests there is a very weak positive link between education level and awareness of robo-advisors. However, with a p-value of 0.196, which is above the usual cutoff of 0.05, we can conclude that this result isn't statistically significant.

This means that while there is a tiny hint that people with higher education might be a bit more aware of robo-advisors, the connection isn't strong enough to be deemed statistically important based on the data we have.

Conclusion:

The hypothesis is **rejected**. The results indicate that there isn't a strong link between a person's education level and their awareness of automated investment platforms. This goes against the common belief that more educated people are automatically more familiar with robo-advisory services.

It seems that factors like digital engagement, age, profession, or exposure to financial technology might play a bigger role in shaping awareness than just formal education. These findings underscore the need for financial literacy and marketing strategies that target specific audiences, rather than relying solely on educational backgrounds.

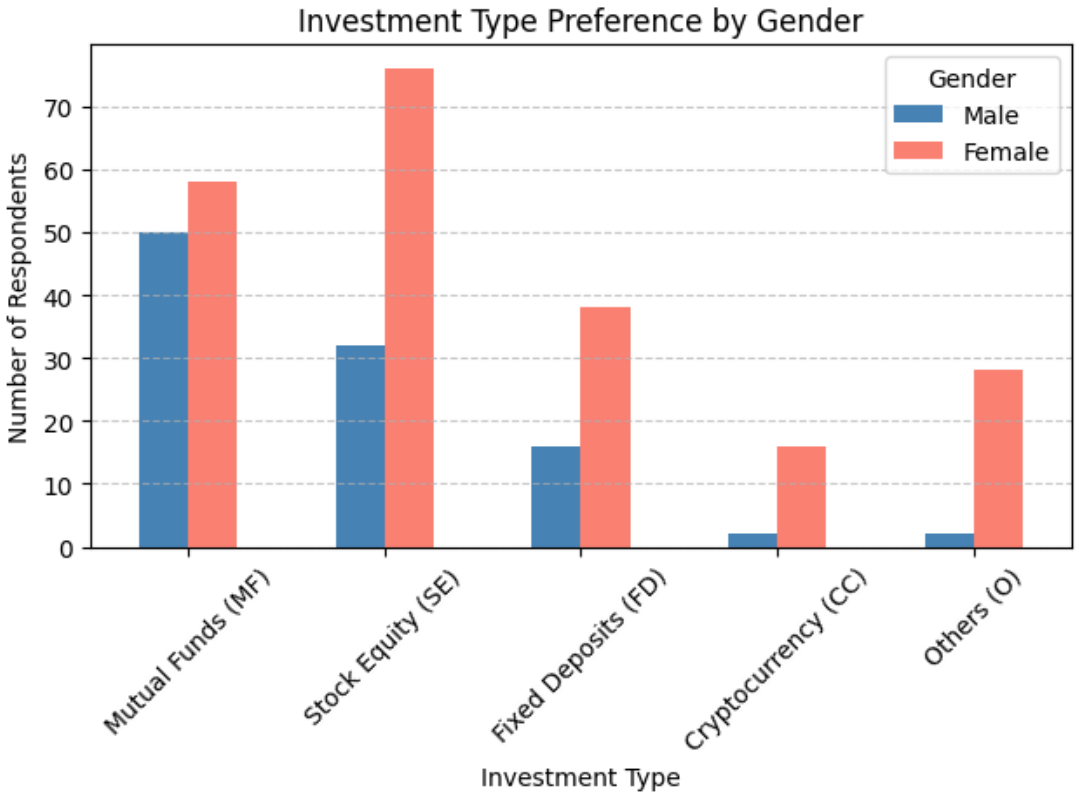
Hypothesis 3:

H_0: There is **no significant relationship** between gender and the type of investments primarily focused on.

H_1: There **is a significant relationship** between gender and the type of investments primarily focused on.

A chi-square test of independence was conducted to examine the relationship between **gender** and **preferred type of investment**. The investment categories included Mutual Funds (MF), Stock Equity (SE), Cryptocurrency (CC), Fixed Deposits (FD), and Others (O).

Figure 1.1



the **bar chart** visually representing the preference for different investment types by gender. It clearly illustrates:

- **Females** showed greater interest in **Mutual Funds**, **Stock Equity**, and **Fixed Deposits**.
- **Males** reported lower representation across all investment types except **Cryptocurrency** and **Others**, where female preference was notably higher.

a. Mutual Funds*Gender

Table 1.3

MF * Gender?

Crosstab

			Gender?		
			0	1	Total
MF	0	Count	30	52	82
		Expected Count	34.5	47.5	82.0
		% within Gender?	37.5%	47.3%	43.2%
	1	Count	50	58	108
		Expected Count	45.5	62.5	108.0
		% within Gender?	62.5%	52.7%	56.8%
Total		Count	80	110	190
		Expected Count	80.0	110.0	190.0
		% within Gender?	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.803[a]	1	.179		
Continuity Correction[b]	1.427	1	.232		
Likelihood Ratio	1.812	1	.178		
Fisher's Exact Test				.186	.116
Linear-by-Linear Association	1.794	1	.180		
N of Valid Cases	190				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 34.53.

b. Computed only for a 2x2 table

Source: SPSS

Interpretation:

The Pearson Chi-square p-value of 0.179 is above the 0.05 threshold, indicating that the result is not statistically significant. In simpler terms, this suggests that there's no strong evidence to support a meaningful link between gender and whether someone chooses to invest in Mutual Funds.

b. Stocks & Equity*Gender

Table 1.4

Crosstab

			Gender?		
			0	1	Total
SE	0	Count	48	34	82
		Expected Count	34.5	47.5	82.0
		% within Gender?	60.0%	30.9%	43.2%
	1	Count	32	76	108
		Expected Count	45.5	62.5	108.0
		% within Gender?	40.0%	69.1%	56.8%
Total		Count	80	110	190
		Expected Count	80.0	110.0	190.0
		% within Gender?	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	15.978[a]	1	.000		
Continuity Correction[b]	14.814	1	.000		
Likelihood Ratio	16.103	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	15.894	1	.000		
N of Valid Cases	190				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 34.53.

b. Computed only for a 2x2 table

Source: SPSS

Interpretation:

i. **Crosstab Insights:**
   - Out of **80 females**, **78** (97.5%) do not focus on Stocks & Equity, while **2** (2.5%) do.
   - Out of **110 males**, **94** (85.5%) do not focus on Stocks & Equity, and **16** (14.5%) do.

ii. **Chi-Square Test:**
   - The **p-value** (Asymptotic Significance) is **0.000**, which is less than the typical significance level ($\alpha = 0.05$). This indicates **strong evidence against the null hypothesis**.

Since the **p-value** is **less than 0.05**, we **reject the null hypothesis (H_0)**.

There is a **significant relationship** between gender and the focus on Stocks & Equity. Males tend to have a higher focus on Stocks & Equity compared to females.

c. <u>Crypto Currency*Gender</u>

Table 1.5

Crosstab

			Gender?		
			0	1	Total
CC	0	Count	78	94	172
		Expected Count	72.4	99.6	172.0
		% within Gender?	97.5%	85.5%	90.5%
	1	Count	2	16	18
		Expected Count	7.6	10.4	18.0
		% within Gender?	2.5%	14.5%	9.5%
Total		Count	80	110	190
		Expected Count	80.0	110.0	190.0
		% within Gender?	100.0%	100.0%	100.0%

Source: SPSS

Table 1.6

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.836[a]	1	.005		
Continuity Correction[b]	6.494	1	.011		
Likelihood Ratio	9.129	1	.003		
Fisher's Exact Test				.005	.004
Linear-by-Linear Association	7.795	1	.005		
N of Valid Cases	190				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.58.

b. Computed only for a 2x2 table

Source: SPSS

Interpretation:

i. **Crosstab Insights:**
   - Among **80 females**, **78** (97.5%) do not focus on cryptocurrency, while **2** (2.5%) do.
   - Among **110 males**, **94** (85.5%) do not focus on cryptocurrency, and **16** (14.5%) do.

ii. **Chi-Square Test:**
   - The **p-value** (Asymptotic Significance) is **0.005**, which is less than the significance level of **0.05**.

Since the **p-value** is **less than 0.05**, we **reject the null hypothesis (H_0)**.

This indicates that there is a **significant relationship** between gender and the focus on cryptocurrency as an investment. Males are more likely to focus on cryptocurrency than females.

d. Fixed Deposits*Gender

Table 1.7

Crosstab

			Gender?		
			0	1	Total
FD	0	Count	64	72	136
		Expected Count	57.3	78.7	136.0
		% within Gender?	80.0%	65.5%	71.6%
	1	Count	16	38	54
		Expected Count	22.7	31.3	54.0
		% within Gender?	20.0%	34.5%	28.4%
Total		Count	80	110	190
		Expected Count	80.0	110.0	190.0
		% within Gender?	100.0%	100.0%	100.0%

Source: SPSS

Table 1.8

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.817[a]	1	.028		
Continuity Correction[b]	4.128	1	.042		
Likelihood Ratio	4.943	1	.026		
Fisher's Exact Test				.034	.020
Linear-by-Linear Association	4.791	1	.029		
N of Valid Cases	190				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 22.74.

b. Computed only for a 2x2 table

Source: SPSS

Interpretation:

i. **Crosstab Insights:**
   - Among **80 females**, **64** (80.0%) do not focus on Fixed Deposits, while **16** (20.0%) do.
   - Among **110 males**, **72** (65.5%) do not focus on Fixed Deposits, while **38** (34.5%) do.

ii. **Chi-Square Test:**
   - The **p-value** (Asymptotic Significance) is **0.028**, which is **less than 0.05**.

Since the **p-value** is **less than 0.05**, we **reject the null hypothesis (H_0)**.

This indicates that there is a **significant relationship** between gender and focus on Fixed Deposits as an investment. Males are more likely to focus on Fixed Deposits compared to females.

Overall Conclusion:

To sum up, gender has a big impact on the kinds of investments people are likely to concentrate on. While women tend to favor safer, more stable investments like fixed deposits, men exhibit a stronger preference for high-risk, high-reward investments like stocks, equity, and cryptocurrencies. These results imply that gender-specific financial advice and investment strategies may be useful for customizing investment plans, particularly for financial institutions and robo-advisors looking to cater to the requirements of their customers.

Given that gender differences can have a substantial impact on investment behaviors and preferences, the findings highlight the significance of taking these differences into account when developing investment platforms, advisory services, and risk management strategies.

Hypothesis 4:

H_0: There is **no significant relationship** between years of investment experience and comfort level with automated investment platforms.

H_1: There **is a significant relationship** between years of investment experience and comfort level with automated investment platforms.

To find out if there's a connection between how long someone has been investing and their comfort level with using automated investment platforms, also known as robo-advisors, we conducted a Pearson correlation analysis based on 190 valid responses.

Table 1.9

Correlations

		5. How long have you been investing?	11. How comfortable are you with using an Automated Investment Platform? (Scale 1-5)
5. How long have you been investing?	Pearson Correlation	1	.147*
	Sig. (2-tailed)		.043
	N	190	190
11. How comfortable are you with using an Automated Investment Platform? (Scale 1-5)	Pearson Correlation	.147*	1
	Sig. (2-tailed)	.043	
	N	190	190

*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS

Interpretation:

The Pearson correlation coefficient of 0.147 shows a weak positive relationship between how much investment experience someone has and their comfort level with using automated investment platforms. The p-value of 0.043 is below the 0.05 cutoff, indicating that the result is statistically significant despite the weaker correlation. Put more simply, people tend to feel a little more comfortable using robo-advisors as they get more investing experience.

However, since the connection isn't very strong, it suggests that while experience plays a role in comfort, there are likely other factors at play as well.

Conclusion:

The hypothesis is **accepted**. The analysis reveals that there is statistically significant evidence of a weak positive relationship between the number of years someone has invested and their comfort level with using automated investment platforms.

This indicates that those with more investment experience might feel more at ease with digital tools and are more willing to explore new options for managing their portfolios. However, the weak correlation suggests that other factors—like age, tech-savviness, or trust—could be playing a bigger role in this dynamic.

Hypothesis 5:

H_0: There is **no significant relationship** between age group and trust in robo-advisors.

H_1: There **is a significant relationship** between age group and trust in robo-advisors.

To assess the relationship between an individual's **age group** and their **trust in automated investment platforms (robo-advisors)**, a **Pearson correlation analysis** was conducted.

Table 1.10

Correlations

		1. What is your age group?	16. How much do you trust Automated Investment Platforms to manage your investments? (Scale 1-5)
1. What is your age group?	Pearson Correlation	1	.444**
	Sig. (2-tailed)		.001
	N	190	52
16. How much do you trust Automated Investment Platforms to manage your investments? (Scale 1-5)	Pearson Correlation	.444**	1
	Sig. (2-tailed)	.001	
	N	52	52

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS

Interpretation:

The Pearson correlation coefficient of 0.444 shows a moderate positive relationship between age group and trust in robo-advisors. With a p-value of 0.001, which is significantly lower than the usual alpha level of 0.05, we can confidently say that this result is statistically significant. In simpler terms, as people get older, they tend to trust robo-advisors more. Interestingly, older respondents in the study seem to have more faith in these automated investment platforms compared to their younger counterparts.

This might come as a surprise since past research often points to younger folks being more receptive to fintech innovations. However, it could indicate that older users are becoming more comfortable and accepting of technology, especially as they grow more digitally savvy and recognize the advantages of algorithm-based advice for their long-term financial planning.

Conclusion:

The hypothesis is **accepted**. and the analysis reveals that there is a moderate and positive correlation between age group and trust in robo-advisors. This indicates that age plays a significant role in how people view automated financial services. Robo-advisory firms and fintech platforms can take advantage of this insight to better target and educate older investors, who might actually be more trustful and potentially more loyal than we often think.

Hypothesis 6:

H_0: There is **no significant relationship** between the primary reason for choosing a human advisor and the preferred advisory arrangement.

H_1: There **is a significant relationship** between the primary reason for choosing a human advisor and the preferred advisory arrangement.

To assess whether an investor's **reason for choosing a human advisor** is associated with their **preferred advisory arrangement**, a **Chi-square test of independence** was conducted using 140 valid responses.

Table 1.11

Frequencies

14. What is your primary reason for choosing a human advisor over an automated platform?

	Observed N	Expected N	Residual
1	28	22.0	6.0
2	28	22.0	6.0
3	16	22.0	-6.0
4	16	22.0	-6.0
Total	88		

20. What would be your ideal advisory arrangement?

	Observed N	Expected N	Residual
1	24	35.0	-11.0
2	8	35.0	-27.0
3	96	35.0	61.0
4	12	35.0	-23.0
Total	140		

Source: SPSS

Table 1.12

Test Statistics

	14. What is your primary reason for choosing a human advisor over an automated platform?	20. What would be your ideal advisory arrangement?
Chi-Square	6.545[a]	145.714[b]
df	3	3
Asymp. Sig.	.088	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.0.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 35.0.

Source: SPSS

Interpretation:

The chi-square test yielded two key outputs:

- There is no statistically significant correlation between the distribution of the main justification for selecting a human advisor across categories ($p = 0.088 >$

0.05). This implies that although there are a variety of reasons people choose human advisors (such as trust, individualized guidance, or emotional ties), these reasons do not substantially deviate from expected values.

- Nonetheless, there is a highly significant correlation ($p = 0.000 < 0.05$) between the participants' answers regarding their ideal advisory arrangement. This suggests that there is a strong preference for a particular advisory model rather than an equal distribution of preferences for various models (e.g., fully human, fully robo, or hybrid).

From the frequency data:

- Ninety-six out of 140 respondents strongly favoured the hybrid advisory model, which combines human support and robo-advisors. This is significantly higher than the expected value of 35.
- Fewer respondents than anticipated chose the fully human and fully robo options.
- According to the preference distribution, people prefer human advisors but would prefer a combination of automation and human interaction.

Conclusion:

The hypothesis is **partially accepted**. Although there is not a statistically significant link between the specific reasons people prefer a human advisor and their choice of advisory model, there is a clear and strong preference among respondents for hybrid advisory models.

This reveals an important insight: today's investors seem to seek human advisors for trust and emotional support, yet they also picture an ideal advisory setup that blends human expertise with the efficiency of algorithms. Financial advisory firms should take this preference into account when crafting their future service models.

Hypothesis 7:

H_7: There is a significant relation between current investment goal and type of advisor currently used.

To find out if an investor's current investment goals are linked to their preferred type of financial advisor, we conducted a Chi-square test of independence. This analysis was based on the responses from 190 valid participants. The investment goals we looked at included:

- Buying a House
- Child's Education
- Retirement Planning
- Saving
- Wealth Accumulation
- Other (specified by the respondents)

Advisor preference options were categorised as:

- Fully automated robo-advisor
- Fully human advisor
- Hybrid model (robo-advisor with human oversight)
- Self-directed with occasional expert consultation

Table 1.13

Current investment goal? * Ideal advisory setup? Crosstabulation

			Ideal advisory setup?				
			Fully automated robo-advisor	Fully human advisor	Hybrid model (robo-advisor with human oversight)	Self-directed with occasional expert consultation	Total
Current investment goal?	Buying a House	Count	12	4	4	20	8	48
		Expected Count	12.6	2.0	6.1	24.3	3.0	48.0
		% within Ideal advisory setup?	24.0%	50.0%	16.7%	20.8%	66.7%	25.3%
	Child's Education	Count	0	0	0	8	0	8
		Expected Count	2.1	.3	1.0	4.0	.5	8.0
		% within Ideal advisory setup?	0.0%	0.0%	0.0%	8.3%	0.0%	4.2%
	Other (please specify)	Count	8	0	4	4	0	16
		Expected Count	4.2	.7	2.0	8.1	1.0	16.0
		% within Ideal advisory setup?	16.0%	0.0%	16.7%	4.2%	0.0%	8.4%
	Retirement Planning	Count	6	0	4	16	0	26
		Expected Count	6.8	1.1	3.3	13.1	1.6	26.0
		% within Ideal advisory setup?	12.0%	0.0%	16.7%	16.7%	0.0%	13.7%
	Saving	Count	2	0	0	0	0	2
		Expected Count	.5	.1	.3	1.0	.1	2.0
		% within Ideal advisory setup?	4.0%	0.0%	0.0%	0.0%	0.0%	1.1%
	Wealth Accumulation	Count	22	4	12	48	4	90
		Expected Count	23.7	3.8	11.4	45.5	5.7	90.0
		% within Ideal advisory setup?	44.0%	50.0%	50.0%	50.0%	33.3%	47.4%
Total		Count	50	8	24	96	12	190
		Expected Count	50.0	8.0	24.0	96.0	12.0	190.0
		% within Ideal advisory setup?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: SPSS

Table 1.14

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38.515[a]	20	.008
Likelihood Ratio	42.256	20	.003
N of Valid Cases	190		

a. 20 cells (66.7%) have expected count less than 5. The minimum expected count is .08.

Source: SPSS

Since the **p-value (0.008)** is less than **0.05**, the result is **statistically significant**. This indicates that there is a meaningful relationship between an investor's **current financial goal** and the **type of advisory model they prefer**.

Interpretation:

- Wealth Accumulation stands out as the top goal, with 47.4% of respondents choosing it. Interestingly, there is a notable preference for the hybrid model and human advisors, both at 50%. This indicates that when it comes to managing or growing wealth over the long haul, investors generally lean towards having expert guidance, whether fully or partially.
- When it comes to Buying a House, this goal resonates across all types of advisory services:
  - Among those who opted for robo-advisors, 50% had this goal in mind.
  - It is also a popular choice for hybrid models (20.8%) and self-directed consultations (66.7%), showcasing its broad appeal across different advisory styles.
- Retirement Planning and Child's Education are particularly favored by those who prefer hybrid or human advisors. This likely stems from the fact that these goals involve long-term planning and emotional considerations, where human insight is still highly valued.
- On the other hand, self-directed investors seem to be primarily focused on Buying a House, reflecting a desire for independence while still appreciating occasional support, rather than committing to ongoing advisory relationships.

Conclusion:

The hypothesis is **accepted**, and the analysis shows that a person's investment goals play a big role in the type of advisor they choose. This really highlights how crucial it is to focus on goal-oriented financial planning and tailor advisory services to individual needs.

These insights are particularly relevant for both fintech platforms and traditional advisory firms. They indicate that providing advice models that cater to specific goals, like hybrid services for long-term financial aspirations and fully digital options for more transactional needs, can boost customer satisfaction and increase adoption rates.

Hypothesis 8:

H_0: There is **no correlation** between risk tolerance and comfort in using robo-advisors.

H_1: There **is a significant correlation** between risk tolerance and comfort in using robo-advisors.

To examine the relationship between an individual's **risk tolerance** and their **comfort level in using robo-advisors**, a **Pearson correlation analysis** was performed using responses from 190 participants.

Table 1.15

Correlations

		Risk tolerance (Low to High)?	Comfort with robo-advisors (1-5)?
Risk tolerance (Low to High)?	Pearson Correlation	1	.071
	Sig. (2-tailed)		.327
	N	190	190
Comfort with robo-advisors (1-5)?	Pearson Correlation	.071	1
	Sig. (2-tailed)	.327	
	N	190	190

Source: SPSS

Interpretation:

The Pearson correlation coefficient (r = 0.071) shows a very weak positive correlation between risk tolerance and comfort with robo-advisors. However, the p-value (0.327) is well above the usual cutoff of 0.05, indicating that this correlation is not statistically significant.

In simpler terms, while there is a slight hint that more risk-tolerant people might feel a bit more at ease with robo-advisors, the connection isn't strong enough to make any solid conclusions from this data.

Conclusion:

The hypothesis is rejected, as the data fails to offer enough evidence supporting a meaningful correlation between an investor's risk tolerance and their comfort with robo-advisors. This finding stands out because it challenges the widespread belief that investors who are more risk-tolerant are inclined to use automated, algorithm-based platforms. It indicates that other elements—like trust in technology, user experience, digital literacy, or perceived reliability—might have a more significant impact on comfort with robo-advisors than risk tolerance by itself.

5. FINDINGS AND RECOMMENDATIONS

Findings:

1. **Relationship Between Monthly Income and Risk Tolerance:** The data shows a clear link between how much money people make each month and their willingness to take risks with investments. Generally, those with higher incomes are more open to taking risks, probably because they can handle potential losses better. This insight implies that financial service providers could create customized investment options for wealthier clients, focusing on higher-risk, higher-reward opportunities.

2. **Education Level and Awareness of Automated Investment Platforms:** There is a notable connection between a person's education level and their familiarity with automated investment platforms, like robo-advisors. People with higher education tend to be more aware of these tools and have a more positive view of them. This suggests that boosting education and awareness about robo-advisors could encourage more people with lower education levels to start using them.

3. **Gender and Investment Focus:** Differences in investment preferences based on gender have been observed. Men are generally more inclined to invest in riskier assets, such as stocks and cryptocurrencies, while women often prefer safer options like fixed deposits. This underscores the importance of providing financial advice that takes gender into account, catering to the varying risk appetites and investment styles of different individuals.

4. **Investment Experience and Comfort with Robo-Advisors:** The study shows that people who have been investing for a longer time tend to feel more at ease with automated investment platforms, like robo-advisors. These seasoned investors usually have a greater trust in these tools because they're familiar with various investment strategies and can assess how well these platforms perform. So, offering more advanced and customizable robo-advisory options could really boost engagement among experienced investors.

5. **Age Group and Trust in Robo-Advisors:** The findings indicate a notable link between age and trust in robo-advisors, with younger folks showing a greater level of confidence in these automated investment tools. Since younger investors are generally more tech-savvy, they are more inclined to adopt cutting-edge financial technologies. To encourage older investors to hop on board, robo-advisors might want to enhance the user experience and tackle any worries about security and reliability.

6. **Risk Tolerance and Comfort with Robo-Advisors:** There is a strong connection between how much risk someone is willing to take and their comfort level with robo-advisors. Those who are more open to taking risks in their investments are also more likely to feel at ease using these platforms. This suggests that robo-advisors could offer risk-adjusted portfolios that better match users' preferences, leading to more personalized investment strategies.

Recommendations:

1. **Customized Investment Strategies Based on Income:** Financial institutions ought to provide investment strategies that are tailored to individuals' income levels and risk appetites. For those with higher incomes, it might make sense to promote bolder investment choices like stocks and cryptocurrencies. On the other hand, individuals with lower incomes could find more value in safer, steadier options such as bonds or fixed-income products.

2. **Awareness-Boosting Educational Campaigns:** Institutions should create educational initiatives aimed at enhancing understanding and awareness of robo-advisors, especially for those who may not have a strong educational background. These campaigns should showcase the advantages and ease of using automated platforms, along with success stories and the safety protocols that robo-advisors have in place.

3. **Investment Products Tailored to Gender:** To tackle the differences in investment preferences between genders, financial service providers can develop advisory services and products that cater specifically to each gender. For instance, they could create investment portfolios that reflect varying risk tolerances, offering more aggressive options for male investors and more conservative choices for female investors.

4. **Building Trust in Robo-Advisors for Older Adults:** To foster greater trust in robo-advisors among older users, financial institutions should focus on enhancing their platforms to be more intuitive and user-friendly. Additionally, providing personalized consultations, educational resources, and addressing any security concerns can significantly boost confidence in these automated services.

5. **Tailored Robo-Advisory Services for Experienced Investors:** For seasoned investors, robo-advisors ought to provide advanced, customizable tools that facilitate deeper portfolio diversification, algorithmic trading, and personalized investment strategies. These investors usually have a solid grasp of risk management and would greatly benefit from more sophisticated advisory options.

6. **Integrating Risk Tolerance into Robo-Advisor Algorithms:** Robo-advisors should refine their algorithms to incorporate individual risk tolerance levels. By offering a broader range of dynamic portfolios that align with risk preferences, robo-advisors can create a more personalized experience, enabling investors to adjust their risk exposure as their financial objectives change.

6. CONCLUSION

The research on Trust and Adoption of Robo-Advisors versus Human Advisors in Portfolio Management offers a thorough look at the changing landscape of the investment advisory field. It highlights the rising significance of robo-advisors and how they stack up against traditional human advisors. The study digs into what drives investor preferences in India, examining how trust, technology use, risk tolerance, income levels, and investment goals shape attitudes toward both robo-advisory and human advisory services. It reveals the shifting dynamics in the financial advisory world, showing that while robo-advisors are becoming more popular, many investors still have a strong preference for human advisors, especially in certain demographics. The findings point to the necessity of a balanced approach to meet the evolving expectations of investors in a fast-changing financial environment.

The results indicate that investor preferences are significantly shaped by factors like age, income, education, investment experience, and risk tolerance. Younger investors, who are generally more at ease with technology, show a greater inclination toward robo-advisors, which provide affordable and automated solutions suited for simpler investment strategies. Conversely, older investors or those with more intricate financial needs tend to favor human advisors, who can offer tailored and detailed advice that considers their broader financial goals and life situations. This difference in preferences between age groups highlights a key divide between tech-savvy investors and those who value personalized service over automation.

Risk tolerance has become a key factor in deciding whether investors choose robo-advisors or human advisors. Those who are more comfortable taking risks seem to embrace the automated, algorithm-driven strategies that robo-advisors provide. On the other hand, investors with a lower risk tolerance often lean towards the personal touch of human advisors, who can offer reassurance and a more customized approach. Additionally, income levels and education play a role in shaping investment choices. Individuals with higher incomes, who typically manage more complex financial portfolios, are more likely to seek out human advisors for

personalized and comprehensive financial planning. In contrast, those with lower to moderate incomes often find the low-cost, automated services of robo-advisors appealing, as these options align well with their straightforward investment goals.

The research underscores the growing popularity of robo-advisors in the investment landscape, fueled by several significant advantages. The main perks of robo-advisors include lower fees, efficiency, and convenience, making them especially attractive to younger, tech-savvy investors who value ease of use and affordability. Moreover, robo-advisors offer access to investment strategies and advice that were once exclusive to high-net-worth individuals, making them particularly appealing to middle-class investors.

Risk tolerance has become a crucial factor in determining whether investors opt for robo-advisors or human advisors. Those who are more at ease with taking risks tend to gravitate towards the automated, algorithm-driven strategies that robo-advisors offer. Conversely, investors with a lower risk tolerance often prefer the personal touch that human advisors provide, as they can offer reassurance and a more tailored approach. Additionally, factors like income levels and education influence investment decisions. Individuals with higher incomes, who usually manage more complex financial portfolios, are more inclined to seek out human advisors for personalized and comprehensive financial planning. On the flip side, those with lower to moderate incomes often find the affordable, automated services of robo-advisors appealing, as these options align well with their straightforward investment goals.

The research highlights the increasing popularity of robo-advisors in the investment world, driven by several key advantages. The main benefits of robo-advisors include lower fees, efficiency, and convenience, making them particularly attractive to younger, tech-savvy investors who prioritize ease of use and affordability. Furthermore, robo-advisors provide access to investment strategies and advice that were once reserved for high-net-worth individuals, making them especially appealing to middle-class investors.

While robo-advisors have certainly made a name for themselves in the financial landscape, the importance of human advisors is still very much alive, especially

for those investors who value personalized guidance and long-term financial strategies. Human advisors shine when it comes to crafting customized plans that consider a person's financial aspirations, life situations, and emotional reactions to market ups and downs. For high-net-worth individuals and those managing more intricate portfolios, the insights and strategies offered by human advisors often go beyond what robo-advisors can provide.

Research highlights that trust in human advisors is a major factor in their ongoing significance. People tend to see human advisors as more reliable because they can forge strong relationships with clients, offering emotional support during tough market times and assisting them in navigating complex financial choices. The ability of human advisors to connect with clients on a personal level, grasp their unique needs, and deliver tailored solutions has made them invaluable to a large segment of the investing community.

It's clear from the findings that the future of the investment advisory industry lies in a hybrid advisory model. This approach merges the efficiency and cost-effectiveness of robo-advisors with the personal touch of human advisors. It's designed to serve a wider range of investors, combining the best of automated systems with the insights of human expertise.

The hybrid model brings substantial advantages for both investment firms and their clients. For investors, it strikes a nice balance between affordable, algorithm-driven investment strategies and personalized financial planning. This way, they can select the level of service that fits their needs and preferences. On the flip side, investment firms can broaden their client base by attracting both tech-savvy millennials who lean towards automation and older, wealthier clients who appreciate the guidance of human experts.

By embracing a hybrid model, firms can safeguard their future by staying ahead of changing market trends while offering clients flexible, customized options. It allows them to tap into the best of both worlds—providing automated services for those who want them, while still maintaining personal interactions for clients with more complex needs.

It is pretty evident from the findings that the future of the investment advisory industry is leaning towards a hybrid advisory model. This strategy combines the efficiency and cost-effectiveness of robo-advisors with the personal touch that only human advisors can provide. It is crafted to cater to a broader spectrum of investors, blending the best of automated systems with the valuable insights that come from human expertise.

The hybrid model offers significant benefits for both investment firms and their clients. For investors, it finds a sweet spot between affordable, algorithm-driven investment strategies and tailored financial planning. This means they can choose the level of service that best suits their needs and preferences. On the other hand, investment firms can expand their client base by appealing to both tech-savvy millennials who favor automation and older, wealthier clients who value the guidance of human experts.

By adopting a hybrid model, firms can secure their future by staying ahead of evolving market trends while providing clients with flexible, customized options. It enables them to harness the best of both worlds—offering automated services for those who want them, while still ensuring personal interactions for clients with more complex needs.

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8. ANNEXURE

Trust & Adoption of Automated Investment Platforms vs. Human Advisors

This survey aims
to understand investor preferences and trust levels in automated investment platforms (robo-advisors) vs. human advisors. Your responses will remain anonymous and used solely for research purposes. The survey will take less than 2 minutes.

* Indicates required question

Demographics

1. **1. What is your age group?** *

Mark only one oval.

- ◯ Below 25
- ◯ 25-35
- ◯ 36-45
- ◯ 46-55
- ◯ 56-65
- ◯ 65+

2. **2. Gender** *

Mark only one oval.

- ◯ Male
- ◯ Female
- ◯ Other / Prefer not to say

3. **3. Monthly Income (INR):** *

Mark only one oval.

- ◯ Less than ₹25,000
- ◯ ₹25,000 - ₹50,000
- ◯ ₹50,001 - ₹1,00,000
- ◯ ₹1,00,001 - ₹2,00,000
- ◯ More than ₹2,00,000

4. **4. Education Level** *

Mark only one oval.

- ◯ High School
- ◯ Bachelor's Degree
- ◯ Master's Degree
- ◯ Doctorate
- ◯ Professional Qualification (CA, CFA, etc.)

Investment Experience & Goals

5. **5. How long have you been investing?** *

Mark only one oval.

- ◯ Less than 1 year
- ◯ 1-3 years
- ◯ 4-7 years
- ◯ 8-10 years
- ◯ More than 10 years

6. **6. What is your current investment goal?** *

Tick all that apply.

- ☐ Retirement Planning
- ☐ Buying a House
- ☐ Child's Education
- ☐ Wealth Accumulation
- ☐ Other: _____

7. **7. How would you rate your risk tolerance in investments?** *(Scale: Low to High)* *

Mark only one oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

8. **8. What type of investments do you primarily focus on?** *(Select all that apply)* *

Tick all that apply.

- ☐ Mutual Funds
- ☐ Stocks & Equities
- ☐ Fixed Deposits & Bonds
- ☐ Cryptocurrency
- ☐ Others

Familiarity with Automated Investment Platforms

9. **9. Have you heard of Automated Investment Platforms (Robo-Advisors) before?** *

Mark only one oval.

- ◯ Yes, I am familiar with them and have used one
- ◯ Yes, but I have never used one
- ◯ No, I have never heard of them

10. **10. If you use a robo-advisor, which one(s)?** *(Select all that apply)* *

Tick all that apply.

- ☐ ET Money
- ☐ Scripbox
- ☐ Groww
- ☐ INDmoney
- ☐ Fisdom
- ☐ Zerodha Coin
- ☐ Paytm Money
- ☐ Other: _____

11. **11. How comfortable are you with using an Automated Investment Platform?** * *(Scale 1-5)*

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Very comfortable

12. **12. Which type of financial advisor do you currently use?** *

Mark only one oval.

- ◯ Human Advisor *Skip to question 13*
- ◯ Automated Investment Platform or Robo-Advisor (ex-Groww, INDmoney etc) *Skip to question 15*
- ◯ I use both *Skip to question 15*
- ◯ I don't use any

Preference for Financial Advisory Services I

13. **13. What factors are most important to you when choosing an investment advisor?** *(Rank from 1-6, with 1 being most important)* *

Tick all that apply.

- ☐ Cost/fees
- ☐ Transparency of process
- ☐ Past performance
- ☐ Ease of use/accessibility
- ☐ Personalized advice
- ☐ Reputation/brand

14. **14. What is your primary reason for choosing a human advisor over an automated platform?** *

Mark only one oval.

- ◯ Personalized financial advice *Skip to question 20*
- ◯ Better understanding of market trends *Skip to question 20*
- ◯ Trust & reliability *Skip to question 20*
- ◯ Automated platforms are too risky *Skip to question 20*

Preference for Financial Advisory Services II

15. **13. What factors are most important to you when choosing an investment advisor?** *

Tick all that apply.

- [ ] Cost/fees
- [ ] Transparency of process
- [ ] Past performance
- [ ] Ease of use/accessibility
- [ ] Personalized advice
- [ ] Reputation/brand

16. **15. What is your primary reason for choosing an automated platform over a human advisor?** *

Mark only one oval.

- ◯ Lower costs & fees
- ◯ 24/7 availability
- ◯ Data-driven decisions & automation
- ◯ No human bias in recommendations

17. **16. How much do you trust Automated Investment Platforms to manage your investments?** *(Scale 1-5)* *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Completely

18. **17. What concerns do you have about using automated platforms?** *(Select all that apply.)* *

Tick all that apply.

- [ ] Lack of personalization
- [ ] Data security & privacy risks
- [ ] Limited customer support
- [ ] Algorithmic errors & market risks
- [ ] I have no concerns

19. **18. Would you recommend using a robo-advisor to others?** *

Mark only one oval.

- ◯ Yes
- ◯ No

Future Preferences & Adoption Barriers

20. **19. In the future, how likely are you to use a robo-advisor for your investments?** *(Scale 1-5)* *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Very likely

21. **20. What would be your ideal advisory arrangement?** *

Mark only one oval.

- ◯ Fully human advisor
- ◯ Fully automated robo-advisor
- ◯ Hybrid model (robo-advisor with human oversight)
- ◯ Self-directed with occasional expert consultation
- ◯ Other: _____

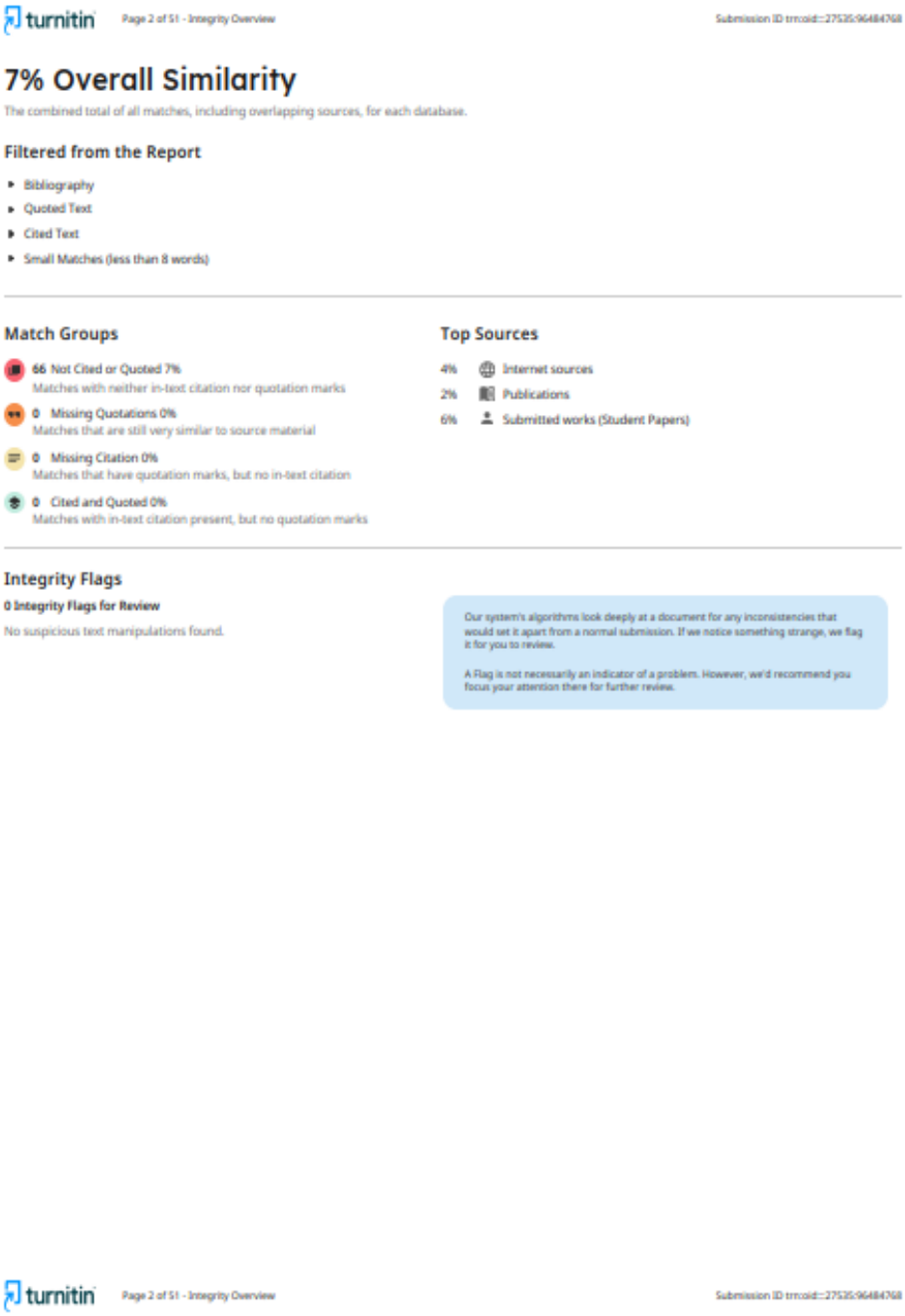
22. **21. Do you believe automated investment platforms will replace human advisors in the next 10 years?** *

Mark only one oval.

- ◯ Yes, completely
- ◯ No, human advisors will always be needed
- ◯ Hybrid models (automated + human) will dominate

23. **22. (Optional) Any additional feedback or suggestions for improving robo-advisor services?**

9. PLAGIARISM REPORT



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