# Use Of Robo Advisors by Fintech Companies to Facilitate Mutual Fund Investments

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#### Abstract

Robo advisors are considered as the mathematic algorithms which are used to understand the investor need and create portfolios based on their risk bearing capacity. In fintech robo advisors are widely used in the mutual fund industry where the investor behaviour is understood through an online survey and based on the risk and return expectations of the investor the mutual funds are assigned to the investor and create a well maintained portfolio. The study is carried out to understand the robo advisors available in the market and how they are utilised. This study helps the investors to understand how to choose robo advisory services provided in the market and what precautions are necessary before selecting one. With the study it is understood that the robo advisors charge different rates of fees for their services and the fees charged should be cross verified by the investor. They also ask the investors to keep a minimum balance in their account and this also varies from company to company. Mutual funds are gaining strong push in the market and beginners to investment choose mutual funds to start with. Robo advisories help gain this impact to mutual funds with their unbiased services.

### **INTRODUCTION**

### **ROBO ADVISORS**

Robo advisors use digital platforms to help investors choose from different investment avenues considering the investor expectations. It is a mechanism where advices are generated using algorithm and automation. Robo advisors require minimal human intervention. They understand the necessities of an investor by conducting an online survey and then provide advices on where to invest the money in. robo advisors are considered as the cheapest way to get financial advices on investments. The online platforms can provide robo advisory services at low cost as it requires no human labour so it is available at a fraction of cost also it is available 24x7 with an internet connectivity.

The robo advisors are considered best suitable for entry level investors. Entry level investors tend to have lower experience and less money to invest in, in such scenarios robo advisors are a perfect match. Robo advisors require only a lower opening balance compared to other platforms which provide the same services. One of the main criticism faced by robo advisory services is that since they need less human interaction they tend to lack empathy and sophistication in their portfolio management. Also they are not well prepared or equipped for uncertain events in the market.

Robo advisory services are considered very apt for traditional investing rather than complex investing. This is the reason why they say robo advisors are suitable for entry level investors or beginners. Earlier the robo advisory services were available only to a limited party. But today, they are available for everyone and the services can reach directly to the customer. Human wealth managers have been using automated algorithms to create portfolios since 2000. Today, most robo advisors use the passive indexing strategy where they focus on higher returns and minimal buying selling of securities. The optimisation of these strategy is carries out by adopting some of the features of Modern Portfolio Theory (MPT). [1]

### <u>Modern Portfolio Theory</u>

The Modern Portfolio theory is coined by an American economist Henry Markowitz in his paper "Portfolio Selection" in the year 1952 and he had won the Nobel Price for the same. The theory states that Diversification is the key to a well performing portfolio. It is important to manage the risk and return that comes from an investment. An individual can diligently work on his portfolio to ensure diversification so that he do not have to bear a huge loss on his investments. [2]

The robo advisors take some tips from the Modern Portfolio Theory and helps the investor to choose funds which assure high returns at lower risk. They work on passive indexing where they consider index funds. Mutual funds are a great avenue to diversify the portfolio.

# BEST ROBO ADVISORS BASED ON INVESTOR CHOICES

1. Wealthfront:

Wealthfront is considered as the king of robo advisors. They are considered overall performers and also better goal planners for their investors. Wealthfront was d in the year 2008 and was one of the first company to provide automated financial advisors to their customers. They manage to provide extensive portfolio management and tax saving options to their users at a very low cost of 0.25%. Wealthfront is one of the strongest overall roboadvisor packages accessible due to its low pricing point and great platform quality.

2. Interactive Advisors:

Interactive Advisors are one of the best platforms to become a socially responsible investor. They focus more on fractional shares and pre built portfolios. They are also known for their portfolio construction. The key to their successful robo advisory service is that they have a strong at intense data research and screening tools. They charge a higher minimum fee and management fees on some portfolios.

3. Betterment:

Betterment is considered as one of the best digital platform for beginners. Betterment provides their services based on the necessity of the investor and they ensure complete transparency in fund management and allocation. They provide educational tools for their users and also no minimum charge is applied on their user account. The only disadvantage is that their options for investing are constrained to ETF"s.

4. Personal Capital:

Personal capital is considered as the best option for investors in portfolio management. They are considered the best because of their tax optimisation and diversification. They provide the investors with different investment management tools and account aggregation. They also focus on providing advanced support for investors who need personal assistance from experts in the field.

5. M1 finance:

M1 finance is considered the best option for sophisticated investors. They facilitate extensive portfolio control along with customisation of their portfolio. They also focus on providing pre built portfolio for investors and have a range of 80 different options to choose from. Their limitation includes less tools for learning and calculation and also they do not provide customers any tax harvesting benefits.

6. Merrill:

They are best known for their learning opportunities provided. They give the investors highly valuable learning experience by providing videos, articles and tools. They also help the investors to plan their investments better. The investment fee charged by Merrill is comparatively higher than others which accounts to 0.45%.

7. E\*trade:

E\*trade makes sure that all their investors have a similar experience they get from their smartphones as they get from the desktop. It gives simple user friendly options with core portfolios through a simple mobile application. They have a quick and easy sign up process and less fees charged.

# **REVIEW DISCUSSION**

Baker and Dellaert (2018) in their paper titled 'Regulating Robo Advice Across the Financial Services Industry' mentioned that consumers are increasingly using automated advisors of different investment avenues, or "robo advisors," to help them choose Insurance policies, investments, and banking products. Robo advisers have the ability to reduce the cost of financial advice while also improving the and transparency. However, for quality regulators who are used to evaluating human intermediates, they provide major new hurdles. well-designed robo adviser will be Α trustworthv and knowledgeable, recommending only appropriate products. However, because robo advisers are designed implemented by people, honesty. and competency, and suitability cannot be presumed. Furthermore, robo advisers introduce unique scale concerns that are distinct from those associated with assessing the behaviour of thousands of individual players. [4]

The article also mentions that the financial industry's regulation of services uses three main sets of regulatory tools to address diverse issues: licencing and education which is aimed at ensuring that the intermediary has at least a minimal level of understanding regarding the goods that the intermediary is licenced to sell; transparency requirements and antifraud regulations that drive brokers to be genuine with their customers; and code of conduct norms, such as the fiduciary standard, that promote sensible behaviour. When regulated firms provide robo advise, these regulatory instruments already apply to robo advisors. Therefore, authorities should assess whether they can and should apply any of these tactics to robo advisers directly, instead of the currently regulated and controlled businesses that use them.

Rühr, A., Berger, B., & Hess, T. (2019) List out the ample resources available for an investor by using robo advisory services. Using artificial intelligence and machine learning facilitate delegation of decisions on investments making the investor have an easy experience in investing his hard earned money. Although with the advantages of algorithms, previous research shows that decision-makers prefer rational decisions from human. Furthermore, even with more work, people prefer to be in charge of their own decisions. We present a model for understanding the fundamental considerations in decision support acceptance. In a vignette-based experiment in the area of investment management, they evaluate the model to describe trade-offs at various levels of automation and user control, as well as examine

implications on the inclination to use decision support. The findings show that automation has a favourable influence on performance expectancy and that user control has a negative effect on perceived risk. [5]

Anshari, M., Almunawar, M. N., & Masri, M. defined the concept (2022). Has of managing personal finance using robo-advisor with digital twin characteristics. Based on an exploratory study, the researchers developed an integrated and interpretative model that examines the most critical things to consider when developing the next level of financial robo-advisor by merging digital twin principles and applications. It begins with an assessment and then analyses the data to develop a model that may be utilised as a foundation for future research. The sources analysed included peerreviewed journal articles, case studies, periodicals, newspaper stories, and novels. The purpose of this study is to assess the concept of a digital twin (DT) as the next generation of intelligent financial advisers for personalising customising and financial technology (FinTech) services. People who utilise a DTenabled robo-advisor may find a spontaneous improvement in their finance management and well-being. A robo advisor will transition from an ad hoc financial advising service to a full and dynamic financial consulting solution for users with the help of DT services. The study offers various key insights into financial robo-advise with DT capabilities, as well as how to transform and optimise smart financial advisory. [6]

Ashta, A., & Biot-Paquerot, G. (2018) in the paper they mention FinTech as a revolution to the simultaneous attack of a number of technologies, including mobile phones and block chain, that are bringing efficiency or reaching out to a variety of niche businesses. Mobile phone technology has increased Internet access to the previously unreached, created opportunities for business where banks were not previously available, and is potentially disruptive. The block chain technology has the potential to be considerably more disruptive, as it has the potential to upend the current monetary system as well as property rights. The proliferation of actors and innovators has produced a muddled scene, resulting in a variety of possible outcomes, including banks freezing, fighting, forming partnerships with rivals, or being driven to flee by Big Tech. [7]

Phoon, K., & Koh, F. (2017). They say that the advent of robo-advisors (RAs) has put traditional fund and wealth management on the defensive. The assets under management (AUM) of RAs has increased by a factor of ten due to increased competition in pricing, transparency, and services, as well as improved predicted returns due to the use of data driven finance and technology with less human interaction. This paper investigates whether RAs have an advantage over traditional asset managers. By integrating the judgments and processing resources of both human and computer, RAs can provide alternate wealth management solutions to satisfy the various needs of personal wealth of their clients. According to the authors, conventional wealth managers are anticipated to respond by offering new and upgraded customized and integrated services at reasonable but competitive rates. [8]

Belanche, D., Casaló, L. V., & Flavián, C. (2019). The goal of this study is to provide a research paradigm to better understand roboadvisor adoption by a wide spectrum of potential clients, in the current scenario where Artificial Intelligence (AI) plays a huge role on financial technology (FinTech). Individual and sociodemographic characteristics are also understand predicted to the primary relationship. The validity of the measuring scales is confirmed by data from a web survey of 765 potential consumers of robo-advisor services from North America, the United Kingdom, and Portugal, which gives the data for structural equation modelling and multi sample assessments of hypotheses. The primary factors of adoption include consumers' opinions toward robo-advisors, as well as interpersonal subjective norms and the media. Users with a greater level of experience with robots are slightly more influenced by perceived utility and attitude; in turn, users with a lesser level of familiarity and customers from Anglo-Saxon nations are much more influenced by subjective norms. [9]

Tao, R., Su, C. W., Xiao, Y., Dai, K., & Khalid, F. (2021). One of the meaningful advances of the fourth industrial revolution is the emergence of robo advisors as alternatives to conventional mutual funds. Robo advisors are automated tools that use algorithms to provide investment

advice to investors. This study compares the risk-adjusted effectiveness of these automated advisors to that of typical US-based funds between 2016 and 2019. Their data imply that robo advisors beat traditional stock, fixed income, stocks and shares, and alternative investments average. Thev on also outperformed three well-known market indices, and the results were consistent across risk-toreward model settings. The results showed that robo advisors not only give quick access and cost-effective assistance, but also outperform traditional advisors in the performance of funds whose risk are adjusted [10]

Uhl, M. W., & Rohner, P. (2018). The authors conducted a passive execution of an investing strategy to get diversified market exposure is often cheaper, more efficient, and more transparent, making it a preferred option to invest for cost-conscious clients. Robo-advisors would become the ideal investing solution for affluent and high-net-worth individuals, as well as retail investors. Collaboration with fintech companies or the acquisition of breakthrough technology might make roboadvisors an essential part for traditional banks and wealth managers. [11]

Gu, C. S., Hsieh, H. P., Wu, C. S., Chang, R. I., & Ho, J. M. (2019) The authors of this research suggest a new mutual fund portfolio optimization technique based on deep-learning market prediction. Their method employs the capital asset pricing model (CAPM), which employs macroeconomic elements to forecast market direction. Then, to predict future market conditions, optimise portfolios, and automation of investments, they managed to create a roboadvisor (RA). Experiments validate their technique using 22 years of data from the S&P500 and US mutual funds. The accuracy of their market prediction approach may reach 84.3 percent, and the rate-of-return of their RA is 13.57 percent, according to the results. Other algorithms are less accurate and less profitable compared to the approach used by the authors. [12]

**Jung, D. (2018).** According to the author, most retail investors find it difficult to take financial risks without the assistance of professionals. In retail and private banking around the world, digital financial advising services, particularly robo-advisors, are gaining popularity. Users can utilise these tools to help them make

financial decisions including asset allocation, risk analysis, and rebalancing. According to recent research, they may be able to augment human financial advice in the long run. The benefits, weaknesses, prospects, and risks of robo-advisory are discussed in this study. the data suggest that robo-advisors have a significant impact on the future of financial advice. [13]

# **TYPES OF ROBO ADVISORS**

Robo-advisors can be classified in three ways: depending on their technical expertise, revenue structure, or scope.

Based on the technical competency robo advisors can be categorised into two categories; simplistic advisors and comprehensive advisors. Simplistic advisors focus on risk bearing capacity of an investor. In order to understand the risk bearing of an individual they conduct a small survey where the investor is asked some questions regarding his financial goals and expectations. After the conventional profiling each individual will be assigned a portfolio which satisfies all his investment expectations. On the other hand, the comprehensive advisors move a step ahead than the simplistic advisors by trying to predict the behaviour of the investor using artificial intelligence. In order to predict the behaviour they ask few more questions during risk profiling.

Next comes the revenue stream of robo advisors. There are two ways in which a robo advisor can make money. It can either charge from the manufacturers of the fund but in this case the robo advisor will be biased to the manufacturer who pays. The second case is where they charge for their advisory services from the investor. This is much beneficial to the investor because the robo advisor will not be bias and will be loyal to the investor. Normally, an advisor charges 100 bps for their services whereas robo advisors only charge from a range between 10-50bps.

Last but not the least, robo advisors can be classified based on their functionality. In india robo advisory services are mostly provided on mutual funds. only a limited number of companies provide robo advisory services on wider asset classes.

## BENEFITS OF ROBO ADVISORY SERVICES

Easily accessible: robo advisory services are available to an investor with internet access. It is available 24X7. The most attractive feature of rob advisory is its low cost services. All these features combined together makes it the most accessible source for wealth management. It also enhances the usage of robo advisory services for a larger group of people.

Robo advisory services are considered as free of human bias. Considering the services provided by a financial advisor it is always possible for he/she to be biased towards a particular asset class or the assessment techniques they use to understand the fund to minimise the risk associated with it. But that is not the scenario when it comes to robo advisory services. They create portfolios using mathematical algorithms and there is zero chance to be biased to any asset class or evaluation procedure. They provide their services unbiased to their investors.

With the extensive services they provide they make sure that the investors financial goals are met. They perform well in managing funds, reducing tax liabilities, and most importantly ensure that the investor is on the right track by mitigating any liabilities that are likely to arise.it also makes sure that your investment priorities are well set in advance. Most young investors do not think about their insurance or retirement plans. But robo advisors keep a track record of your investments and bother you to have a better plan on your future and makes sure you are on the right track. [14]

# CONCLUSION

Robo advisors are mainly functioning in the mutual fund industry and it has proven its advantages in the field. The mutual fund industry is considered as the best platform for beginners who are not yet ready to take on bigger risk. Robo advisories make sure that the investor is provided with the best possible management of their portfolio, with proper diversification. There are certain things which the investor has to understand and learn before choosing the best robo advisors available in the market. With the study it is understandable that there are different types of advisors and it is important to understand the advisor he 'she chooses from. Normally financial advisors take certain percentage of the return from the investor based on his/her portfolio. On the other hand, robo advisories charge a fraction of money for their services. They normally charge a lesser fee than human advisors for creating a portfolio by understanding the customer risk tolerance by asking them a few questions. The best robo advisory services can be identified by looking at their presentation. A well maintained genuine robo advisory firm would make the investor happier. A perfect robo advisory service can provide you with hacked data.

Robo advisors are still being scrutinised by federal officials. The Securities and Exchange Commission has its own guidelines for investing with robo advisers, but the most pressing question is whether robo advisors (and the businesses that own them) actually exercise fiduciary responsibility by prioritising the needs of their clients. It's critical to understand the hazards of putting your finances to the robo adviser sector, which is currently rife with limits and consequences. As big investment firms and even banks enter the market, more advisory services and pricing diverse alternatives are expected to emerge. As major financial institutions begin to provide their own robo adviser services to small investors, robo advisor providers will undoubtedly begin to differentiate themselves.

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