

**Major Research Project on**  
**Investor Attitude and Perception Towards**  
**Technological Mutual Fund**

**Submitted By**

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## CERTIFICATE

This is to certify that **Mr. Sagar Kataria**, roll no. **2K21/DMBA/107** has submitted the project dissertation report titled “**Investor’s Attitude and Perception Towards Technology Mutual Fund**” in partial fulfilment of Master of Business Administration(MBA) program from Delhi School of Management, Delhi Technological University, New Delhi during the academic year 2021-23.

Signature of the Guide

Dr. Rajan Yadav

Signature of Head of Department

Dr. Archana Singh

## **DECLARATION**

I, Sagar Kataria, student of MBA 2021-23 of Delhi School of Management, Delhi Technological University, hereby declare that Project Dissertation report on “**Investor’s Attitude and Perception Towards Technology Mutual Fund**” submitted in partial fulfilment of Degree of Master of Business Administration is the original work conducted by me. I also confirm that neither I nor any other person has submitted this project report to any other institution or university for any other degree or diploma. I further declare that the information collected from various sources has been duly acknowledged in this project.

**Name: Sagar Kataria**

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## **ACKNOWLEDGEMENT**

I would like to gratefully acknowledge the contribution of all the people who took an active part and provided valuable support to me during the course of this study. Without their guidance, support and valuable suggestions during the research, the outcomes and results would not have been accomplished.

I sincerely thank **Dr. Rajan Yadav**, my faculty mentor at Delhi School of Management who provided valuable suggestions, shared his rich academic experience and helped me script the exact requisites.

Last but not the least, I would like to thank all my colleagues whose valuable inputs help me complete this research.

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## EXECUTIVE SUMMARY

In few years Mutual Fund has emerged as a tool for ensuring one's financial wellbeing. Mutual Funds havenot only contributed to the India growth story but have also helped families tap into the success of Indian Industry. As information and awareness is rising more and more people are enjoying the benefits of investing in mutual funds.

Technology mutual funds have been gaining popularity among investors in India due to the potential for high returns and growth in the technology sector. This report aims to analyze customer behavior towards buying technology mutual funds in India. The report will include a literature review, an overview of different Indian technology funds, best performers in this sector, and research findings.

By investing in a technology mutual fund, investors can gain exposure to a diversified portfolio of technology companies, which can potentially provide higher returns than other sectors. However, it's important to note that technology investments can also be volatile, so investors should carefully evaluate their risk tolerance and investment goals before investing in a technology mutual fund.

A technology mutual fund is a type of mutual fund that invests primarily in technology-related companies. These funds typically invest in a diversified portfolio of technology companies, such as hardware, software, telecommunications, and internet-related businesses.

Technology mutual funds are popular among investors who believe that the technology sector is likely to experience strong growth in the future. These funds offer exposure to a broad range of companies that areinvolved in the development and advancement of new technologies and may provide potential for capital appreciation over the long term.

Investors should carefully consider the risks associated with investing in technology mutual funds, including the potential for volatility, concentration risk, and the possibility of technological obsolescence. It is always important to conduct thorough research and consult with a financial advisor before making anyinvestment decisions. For investors.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background

**Figure 1.1 Mutual Funds**



**Source:** [www.google.com](http://www.google.com)

Mutual funds pool the money of numerous investors in order to invest in a diversified portfolio of securities, such as stocks, bonds, and other assets. It is the responsibility of qualified fund managers to manage the funds, select, and monitor investments to achieve the investment objective of the fund.

For people with diverse financial goals, risk tolerances, and time horizons, the Securities and Exchange Board of India (SEBI), which oversees mutual funds, offers a number of investing possibilities. Diversification, expert management, liquidity, and convenience are just a few advantages that mutual funds can offer to investors.

The many mutual fund schemes available to investors include equities funds, debt funds, hybrid funds, sectoral funds, and index funds. Mutual fund investments can be made in lump sums or through systematic investment plans (SIPs), which allow investors to make a set amount of investments at predetermined intervals.

## **1.2 Scope of Study:**

The following are included in the study's scope for the subject of "Investor's Attitude and Perception Towards Technology Mutual Fund":

### **1.2.1 Geographic Scope:**

Location The study's target audience will be Indian investors in technology mutual funds.

### **1.2.2 Sample Size and Selection:**

The study would take a sample of Indian technology mutual fund participants who are individual investors. Combining probability sampling methods with non-probability sampling techniques will be used to choose the sample.

### **1.2.3 Timeframe:**

The study will span the most recent years starting from the time the research was done.

### **1.2.4 Variables:**

The following aspects of investor attitudes and perceptions concerning technology mutual funds will be the main focus of the study.

- Knowledge of technology mutual funds;
- Appreciation of the advantages and drawbacks of investing in technology mutual funds.
- Elements affecting mutual fund investments in technology

## **1.3 Problem Statement:**

In order to better understand how investor's view and approach investing in technology mutual funds, the project topic "Investor's Attitude and Perception Towards Technology Mutual Fund" seeks to research and investigate these issues. This study will delve into the underlying views and convictions that investors have regarding technology mutual funds and look into the variables affecting their investing choices.

The study intends to shed insight on the factors that influence investors' decisions to invest in technology mutual funds, as well as their expectations for returns, levels of risk tolerance, and sector expertise. In addition, the project will look into how investors' views and impressions of technology mutual funds are influenced by demographic variables like age, gender, income, and education.



The information gathered from this study can be utilised to advise mutual fund firms, financial advisors, and investors on how to approach and understand investing in technology mutual funds more effectively. The research findings might also aid in the creation of more potent advertising campaigns to draw new investors to technology mutual funds.

#### **1.4 Objectives of the study**

In order to better understand the elements that affect investors' decision-making and the potential ramifications for the mutual fund business, it is important to look into how investors feel about technology mutual funds. The research specifically aims to:

- Define the aspects of investors' expertise, risk tolerance, investment objectives, and demographics that affect their attitudes and perceptions toward technology mutual funds.
- Analyze how historical performance have influenced investor decisions when it comes to technology mutual funds.
- Evaluate the potential effects on the mutual fund business of investor attitudes and perceptions regarding technology mutual funds, as well as the tactics that mutual fund companies might employ to draw in and keep this group of investors.
- Determine the extent to which investors are aware of technology mutual funds.
- Assess how investors view the dangers and advantages of investing in technology mutual funds.
- Identify the important variables, such as fund performance, expenses, brand reputation, and market trends, that affect investors' decisions to invest in technology mutual funds.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Literature Review

Investors typically have a favorable view towards technology mutual funds, especially those with a solid track record of performance, according to a 1999 study by Shyam-Sunder and Myers. They discovered that investors thought of technology mutual funds as a method to diversify their portfolios and get exposure to the technology industry.

In a different study conducted by Lee and Wang in 2005, the researchers discovered that the length of the investor's investment horizon and their risk tolerance had an impact on how they perceived technology mutual funds. They discovered that investors with long investment horizons and high-risk tolerances were more inclined to invest in technology mutual funds, whereas those with short investment horizons and low risk tolerances were less likely to do so.

Similar to this, a 2005 study by Vlaar and Werker discovered that investors' perceptions of risk and investment objectives affected how they regarded technology mutual funds. They discovered that investors were more likely to invest in technology mutual funds if they were more risk-tolerant and had growth-oriented investing goals.

According to a study by Hsu and Wu (2017), investors frequently have a favourable perception of and are eager to participate in technology mutual funds. The study found that because of the possibility for large returns and the advantages of diversification, investors thought of technology mutual funds as an appealing investment option.

In a similar vein, a 2018 study by Hameed and Rouf discovered that investors view technology mutual funds favourably and are eager to invest in them. According to the study, the possibility for large returns, exposure to the technology sector, and the advantages of diversification were what drew investors to technology mutual funds.

In a similar vein, a 2018 study by Hameed and Rouf discovered that investors view technology mutual funds favourably and are eager to invest in them. According to the study, the possibility for large returns, exposure to the technology sector, and the advantages of diversification were what drew investors to technology mutual funds.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Research design

The study will employ a quantitative research methodology using a survey questionnaire to collect data from the sample.

The research design highlights the advantages of quantitative research in terms of data collecting, recording techniques, and the research instrument.

Data was collected and administered personally via google forms. Convenience sampling was used. Because they are standardized to test the hypothesis, statistical techniques were employed to determine validity, reliability, and statistical significance.

Data was analyzed using SPSS version 29.

#### 3.2 Sources of Data

My study is on the performance evaluation of mutual fund of Sectoral equity funds. The time duration of study is 2017 to 2022. For collecting all the data related to study prefer the secondary mode. The sample consists of 6 mutual fund scheme of sectoral equity fund. In this study, some schemes from the bank, mutual fund intuition, private mutual fund company or some are public undertaking the company. For comparing the market return with the scheme return BSE benchmark Index used and the risk-free rate is collected from the US treasury department.

To collect the NAV different company sites were used. The official mutual fund used. There are some other sites from where I collected the data like R.R. finance, AMFI. I take the help of different AMC's company like HDFC, LIC, Franklin India and SBI etc. The benchmark index for the entire scheme is same. Official site of BSE is used from their historical data was taken to calculate the benchmark index. For the risk-free return, the US treasury rate was taken.

### **3.3 Sample Profile**

In this study the period of 2016-17 to 2021-22 included. This study period covers the current market of mutual fund in India. This shows the future of Sectoral fund future and how it better than the other scheme. The main reason behind to take the study between 2016-17 to 2021-22 is the availability of data. The entire scheme in this study is from starts to end i.e., the base period of all the data was same for all the data.

## CHAPTER 4

### CASE STUDY

#### 4.1 Technology Mutual Fund

Technology mutual funds are becoming increasingly popular among investors due to the potential for strong growth in the technology sector. This report will provide a literature review on customer behavior towards buying technology mutual funds. It will also discuss different technology funds, best performers in this sector and research findings.

Investors generally have a positive attitude towards the introduction of technology mutual funds as they provide an opportunity to invest in the technology sector without the need for individual stock selection. Technology mutual funds are managed by professional fund managers who use their expertise to invest in a diversified portfolio of technology companies.

Due to the potential for significant returns and long-term growth opportunities in the technology industry, investors may find technology mutual funds to be an alluring investment option. Additionally, as they invest in a wide range of technology companies across numerous sub-sectors, including software, hardware, and semiconductors, technology mutual funds can help investors by promoting diversification.

**Fig 4.1 Technology Fund**



**Source:** [www.google.com](http://www.google.com)

## 4.2 Risk Factors in Mutual Fund

The often-used phrase is "Investments in mutual funds are subject to market risks; please read the offer document carefully before investing." Investors in mutual funds frequently disregard this warning, much like they do with cigarette warnings. But it's crucial that you understand the dangers you're incurring as a mutual fund investor.

The market risks referred to in the above statement are of two types:

1. Systematic risks are those that an investor cannot control, such as political considerations, exchange rate fluctuations, or even inclement weather.
2. Risks that diversification techniques can help you control These risks are managed by your fund management in a mutual fund, but you should still be aware of them. These can be divided into four major categories: business risk, concentration risk, liquidity risk and political risk.
  - a. **Concentration Risk:** A mutual fund runs the risk of concentration when it invests a disproportionate amount of its capital in a single stock or industry. Since they only invest in one sector, sector funds by definition experience concentration risk.
  - b. **Liquidity Risk:** The fund is at risk of liquidity risk if it is unable to promptly convert its holdings into cash in response to investor demands for redemption or as part of portfolio rebalancing. This risk exists for mutual funds that invest in small-cap stocks.
  - c. **Political Risk:** New governments bring cutting-edge philosophies and regulations for the new economy. It is frequently asserted that politics frequently plays a role in economic decisions. Changes in government increase the risk of uncertainty that each participant in the financial services sector must deal with. Mutual Funds are therefore not an exception.
  - d. **Business Risk:** A mutual fund's corpus may have been invested in the stock of a corporation. That business cannot declare a dividend if it has any setbacks.

**Other risks associated with mutual funds are as follows:**

- **Investment Risks:** The Asset management Company's (AMC) ability to make profitable investments determines whether the Mutual Fund is profitable or not. The fund will suffer greatly if the investing advice is bad. Different funds have varying levels of investment knowledge, which is evident in the returns they provide to investors.
- **Scheme Risks:** There are some hazards that come with the scheme itself. Everything is dependent on the type of the plan. Risks are higher, for instance, in pure growth schemes. It is clear since one must take more risks in a growth plan if one wants to get higher profits.
- **Credit Risk:** The credit risk you face is determined by a company's capacity to service its debt using its cash flows. Independent rating organisations that grade businesses and their paper, like as CRISIL, quantify this credit risk. A rating of "AAA" is the safest while a grade of "D" indicates poor credit quality. A well-diversified portfolio could reduce this risk.

**4.3 Top performer Technology Mutual Funds in India**

**Franklin India Technology Fund**

**Fig 4.2** Franklin Technology Fund:



**Source:** [www.google.com](http://www.google.com)

A mutual fund called Franklin Technology Fund mostly invests in global technology firms. By investing in stock and equity-related securities of companies in the technology industry, the investment goal of the fund is to give its investors long-term capital appreciation. Franklin Templeton Asset Management (India) Pvt. Ltd. oversees the fund's management.

As of September 2021, some of the top holdings of Franklin Technology Fund include Amazon, AlphabetInc, Taiwan Semiconductor Manufacturing Co, Microsoft, and Facebook.

### **Aditya Birla Sun Life Digital India Fund**

**Fig 4.3** Aditya Birla Capital



**Source:** [www.google.com](http://www.google.com)

The "Aditya Birla Sun Life Digital India Fund" is a mutual fund that invests in companies that are expected to benefit from India's developing digital economy. The fund primarily invests in companies that offer communication, e-commerce, digital payments, and IT services.

As of September 2021, the fund's total assets under management (AUM) were around INR 1,009 crore. The portfolio's top holdings are Infosys, TCS, HCL Technologies, and Mindtree.

### **UTI Global Investors' Technology Fund**

**Fig 4.4** UTI Mutual Fund



**Source:** [www.google.com](http://www.google.com)

A mutual fund that invests in international technology businesses with a concentration on the US and developing markets is called the UTI Global Investors' Technology Fund. The fund invests in companies that are expected to benefit from technology advancements and innovation in order to provide investors with long-term capital growth.



## **ICICI Prudential Technology Fund**

**Fig 4.9** ICICI Prudential Mutual Fund



**Source:** [www.google.com](http://www.google.com)

A mutual fund that invests in technology businesses across the market capitalization spectrum is called the ICICI Prudential Technology Fund. The fund aims to offer participants long-term wealth appreciation through investments in companies that are projected to benefit from technological innovation and advancements.

The fund's total assets under management (AUM) were around INR 2,288 crore as of September 2021. Companies like Infosys, Tata Consultancy Services, HCL Technologies, and Wipro are among the fund's top holdings.

## **HDFC Technology Opportunities Fund**

**Fig 4.10** HDFC Technology Opportunities Fund



**Source:** [www.google.com](http://www.google.com)

The HDFC Technology Opportunities Fund is a mutual fund that invests primarily in technology companies with high growth potential. The goal of the fund is to give investors long-term capital growth by making investments in businesses that are anticipated to profit from technological innovation and developments.

## CHAPTER 5 DATA ANALYSIS

### 5.1 Quantitative Analysis

#### Tools for Performance Measures

Following are statistical techniques based on which the analysis and comparison of various equity schemes are done.

##### 1. Return

The total return on an investor's portfolio includes both the portfolio's value change and any income it generated while the investor was making investments. This is quite easy to translate into an equation, assuming no additions or subtractions, and it calculates the % change in value by comparing the final value to the starting value.

$$\text{Return} = \frac{(\text{NAV}_t - \text{NAV}_{t-1}) / \text{NAV}_{t-1} - \text{Index} / \text{benchmark return} = (I_t - I_{t-1}) / I_{t-1}}$$

NAV= Net assets value of the mutual fund scheme for month t, NAV of t-1 is the net assets value for the month (t-1).

##### 2. Beta (Risk)

In comparison to the market as a whole, a security's or a portfolio's beta value indicates how volatile or systematic the risk is. A model that determines an asset's expected return based on its beta and anticipated market returns uses beta is the capital asset pricing model (CAPM). A mutual fund with a beta of 1.0 swings with the market perfectly. Compared to the underlying benchmark, portfolios with higher volatility, such as aggressive growth funds, have betas greater than 1.0; investments with lower betas are considered to be more conservative.

##### 3. Sharpe Ratio

A metric created by Nobel winner William F. Sharpe to gauge performance after adjusting for risk. The risk-free rate, such as the yield on a 10-year U.S. Treasury bond, is subtracted from the rate of return for a portfolio to obtain the Sharpe ratio, which is then divided by the standard deviation of the returns on the portfolio. The Sharpe ratio's equation is:

$$S = \left( \frac{R_p - R_f}{\sigma_p} \right)$$

It is the ratio used to compare rate of reward with the risk of gaining that reward. The higher the ratio, the better is the risk-adjusted performance.

#### 4. Treynor's Ratio

Based on systematic risk as specified in equation 8, Jack Treynor (1965) developed an indicator of portfolio performance measurement known as a reward to volatility ratio. He assumes that holding a diverse portfolio will allow the investor to completely eliminate unsystematic risk. The excess return over the risk-free rate per unit of systematic risk, or risk premium per unit of systematic risk, is hence his performance metric, written as TP.

$$\text{Treynor Ratio} = \frac{r_p - r_f}{\beta_p}$$

#### 5. Jensen Alpha

Jensen's measure is a risk-adjusted performance indicator that, when taken into account with the portfolio's or investment's beta and the overall market return, shows the average return on a portfolio or investment that is either higher or lower than that projected by the capital asset pricing model (CAPM).

The term "alpha" or "Jensen's alpha" are other names for this measurement.

$$\alpha = R_p - [R_f + (R_m - R_f) \beta]$$

**Where:**

**R<sub>p</sub>** = Realized return of portfolio

**R<sub>m</sub>** = Market return

**R<sub>f</sub>** = risk-free rate

## FINDINGS AND ANALYSIS

This chapter deals with the analysis of this study. Before doing this the researcher required to know about the tools and technique which are going to be used in this chapter. In this study, different tools are used such as Treynor ratio, Sharpe ratio and measure. Before doing the analysis, different table are displayed. These tables reveal about the code and the average return of sample Index fund scheme i.e., growth of sample Index fund scheme. This chapter reveals the result of all the tools and techniques.

**Table 5.1 Sample Index Fund Scheme and Benchmark index for a Study Period**

<b>Code</b>	<b>Scheme Name</b>	<b>Index Name</b>
<b>A1</b>	ICICI Prudential Technology Fund - Growth	S&P BSE SENSEX
<b>A2</b>	Aditya Birla Technology Fund	S&P BSE SENSEX
<b>A3</b>	Franklin India Technology fund - Growth	S&P BSE SENSEX

**Source:** Own Analysis

This table reveals about the code of sample sectoral equity fund scheme for this study. Technology Sector is coded with A.

## Performance Evaluation of sample Sectoral equity fund schemes.

### Average return

The returns are a measure used to compare the various securities on the basis of daily, weekly, monthly or yearly returns which a investor gets for his or her investment. Average return here is done from daily returnsto annual.

**Table 5.2**

<b>Code</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>
<b>A1</b>	61.8	26.5	3.2	-4.0	20.3
<b>A2</b>	49.4	21.2	10.7	-3.4	22.7
<b>A3</b>	53.5	17.7	4.2	-2.6	19.4

**Source:** Own Analysis

In the Technology sector the returns vary from -4% to 62 %, the returns are maximum in the initial years and much growth is not seen in Technology sector scheme returns.

### Risk and Return

Risk and return is measured to check the performance of the schemes on the basis of risk and return both simultaneously. As the risk and return should not be used solely for decision making, it can be used for further calculations.

**Table 5.3 Risk and return of sample mutual: fund schemes**

<b>Code</b>	<b>Rp</b>	<b><math>\Sigma p</math></b>	<b>Rm</b>	<b><math>\sigma m</math></b>	<b>Rf</b>
<b>A1</b>	-0.00067641	0.009608492	0.0009	0.01215	0.00002
<b>A2</b>	-0.000655	0.01033100	0.0009	0.01215	0.00002
<b>A3</b>	-0.0013579	0.03068795	0.0009	0.01215	0.00002

**Source:** Own Analysis

This table shows the market risk & return, and scheme risk & return of 3 schemes. This table will not give the clear picture about the scheme. It will help for further calculation. In this the content table is Rp denotes the return of scheme, Rm shows the return of the market. Risk of scheme and market shown as  $\sigma p$  and  $\sigma m$ . The market risk-free rate is 0.00002 (Daily).

**Sharpe ratio, Treynor ratio, Sharp measure**

*Sharpe ratio* calculates the reward per unit of risk and uses it to gauge the performance of a company or investment strategy. The excess return to volatility ratio of an asset is what determines this. As the reward-to-variability ratio, it is also known.

*Treynor ratio* is a gauge of stock performance. It evaluates a scheme's performance in relation to a risk-free asset (usually Treasury bills) per ascribed amount of market risk. The Treynor ratio indicates how well a fund is performing.

**Table 5.4 Result of Sharpe ratio, Treynor ratio, Sharp measure Analysis**

Code	Sharpe ratio		Treynor ratio		Sharpe measure	
	Scheme	Market	Scheme	Market	Unique risk	Systematic risk
<b>A1</b>	-0.07271	0.054803	-0.14720	0.10468	0.00000	-0.00006
<b>A2</b>	0.061252	0.054803	0.01405	0.01103	0.00000	0.00195
<b>A3</b>	-0.04497	0.054803	-0.00667	0.00240	0.00000	0.04272

**Source:** Own Analysis

This table reveals about the Sharpe ratio, Treynor ratio & sharp measure. These schemes were compared with the benchmark index of S&P BSE SENSEX. The different comparison techniques used like overperformed and underperformed.

In **Sharpe ratio**, the scheme is compared with the benchmark index of SENSEX. Higher the Sharpe ratio value of the sample indicates that it provides a higher return than the market return. It means it provides a higher return on one unit of risk. In this comparison 33.33% of schemes are over performed by Aditya Birla SNLM Technology Fund. The other funds are underperformed due to many reasons but in future, they may provide a better return.

## Jensen Index

The Jensen index, which is based on the capital assets pricing model (CAPM), is used to assess a portfolio's risk-adjusted performance in respect to projected market return. It will assist the investor in selecting the ideal portfolio structure with a low risk and high return.

**Table 5.6 Result of Jensen Index**

$$\alpha_j = r_i - [r_f + \beta_i(r_M - r_f)]$$

Code	A	$\beta$
A1	-0.0007	0.004746
A2	0.00061	0.045026
A3	-0.00148	0.206877

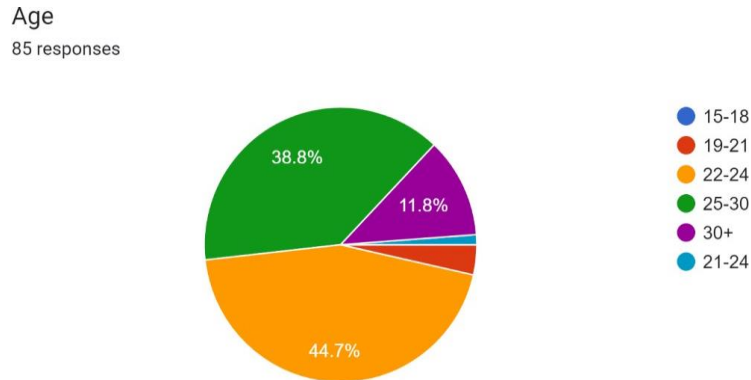
**Source:** Own Analysis

The Jensen index aids in the investor's search for the best programme. In other words, it will select the optimum strategy, but this strategy will produce a strong long-term return. It will offer a lower return than the market in the current environment, either negatively or positively. In this example, a positive alpha means that the mutual fund manager made more than enough money to cover the risk he took over the year. The only fund that offers positive alpha in this case is Aditya Birla Tech.



## 5.2 Descriptive Analysis

**Fig 5.1** Classification of Age



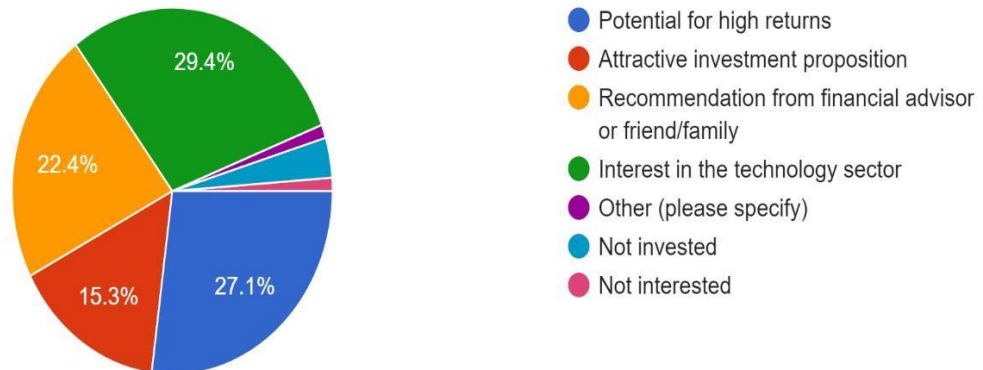
**Source:** Own Analysis

As per above most of the people who filled this questionnaire is from 22 to 24 Years old. 2.

**Fig 5.2** Motivation to invest in technology mutual fund

If you have invested in a technology mutual fund, what motivated you to invest in it?

85 responses



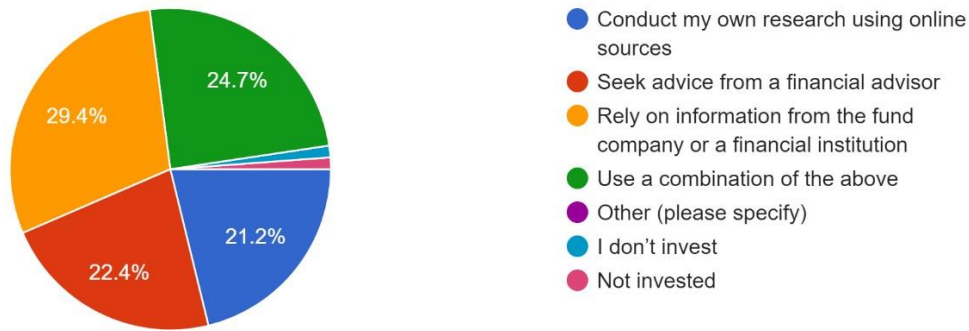
**Source:** Own Analysis

Interest in technology sector motivates investor to invest in technology Mutual Fund. Around 30% people invested in technology fund due to interest in Technology.

**Fig 5.3** Research and evaluation of technology mutual funds

How do you typically research and evaluate technology mutual funds before making an investment decision?

85 responses



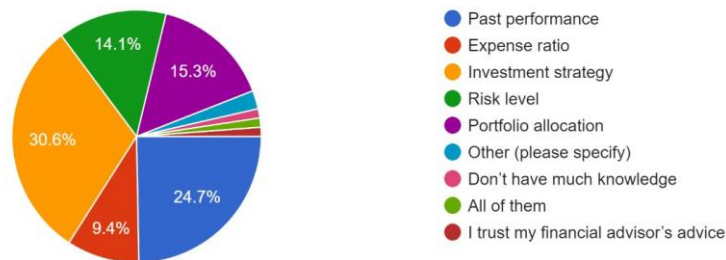
**Source:** Own Analysis

Investor invests in this kind of fund as per their own research using available online sources like information available on their website, Annual reports, Predictions available on different websites.

**Fig 5.4** Factor for selecting technology mutual funds

Which of the following factors do you consider most important when selecting a technology mutual fund?

85 responses



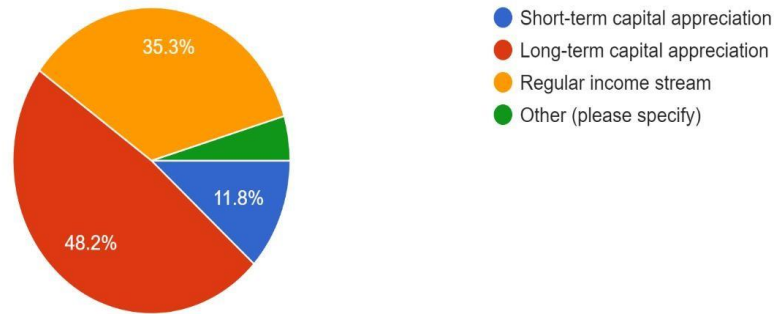
**Source:** Own Analysis

As per above responses investor invest in fund as per their past performance like the returns that gave to their existing investors which motivates investors to invest more in this product. Return is the main aspects of every investment.

**Fig 5.5 Investment Goal**

What is your investment goal when investing in a technology mutual fund?

85 responses



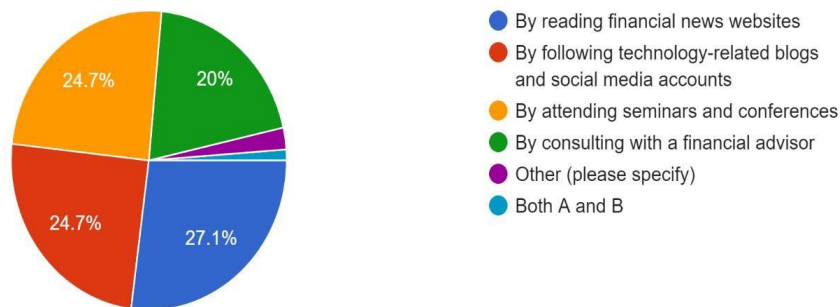
**Source:** Own Analysis

Investors invest in this fund for Long Term Capital Appreciation. Most of the investor invest in mutual fund for long term and expects high return as compared to other class of asset in less risk compared to trading in share market.

**Fig 5.6 Information about developments in technology sector**

How do you stay informed about developments in the technology sector?

85 responses



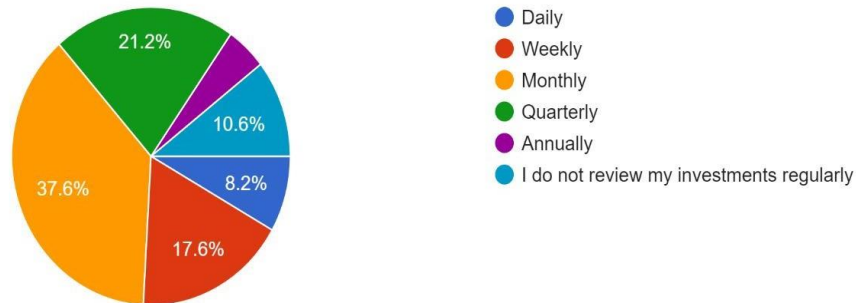
**Source:** Own Analysis

Investors update us by gaining knowledge from reading financial news website and following technology-related blogs and their social media accounts. This gives investor a base to invest their money in this fund.

**Fig 5.7** Review of investment

How often do you review your investments in technology mutual funds?

85 responses



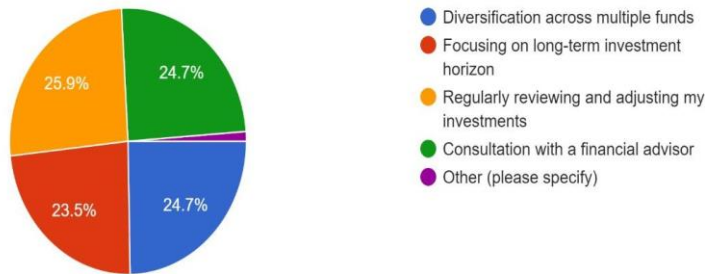
**Source:** Own Analysis

Most of the investor review their fund portfolio on monthly basis. 37.6% Review their portfolio on monthly basis as they choose the investment fund after their research, interest, and past and future return.

**Fig 5.8** Risk management of technology mutual funds

How do you manage risk when investing in technology mutual funds?

85 responses



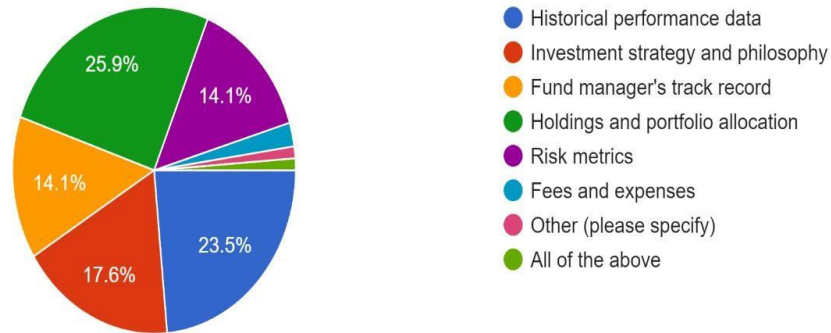
**Source:** Own Analysis

Investor regularly review their investment and adjust their investment as per their market or product research. Latest trend or any news related to specific fund or asset may change their investment to gain short- or long-term gain.

**Fig 5.9** Pre – Information for investing

What type of information would you like to have before investing in a technology mutual fund?

85 responses



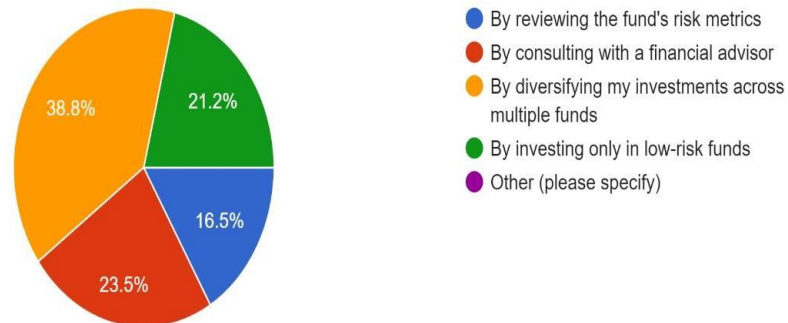
**Source:** Own Analysis

Investors prefer all the above factors while investing their money in this particular fund and Historical performance data is the most important factor among all above factors as the main motive of the investors is to gain profit as much as they get from their investment.

**Fig 5.10** Risk assessment of investing in technology mutual funds

How do you assess the risk associated with investing in technology mutual funds?

85 responses



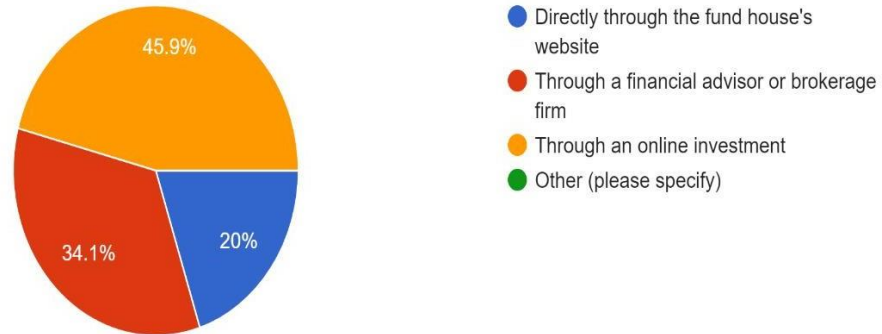
**Source:** Own Analysis

As per above response investor also do investment in diversified fund to reduce long term capital gain risk. Diversified investment also helps the investor gain more profit as 1 fund is not enough to provide maximum gain. Also, investor is ready to invest in Low-risk technology fund even though they give less return as compared to other funds.

**Fig 5.11** Mode of Investing

What is your preferred mode of investing in technology mutual funds?

85 responses



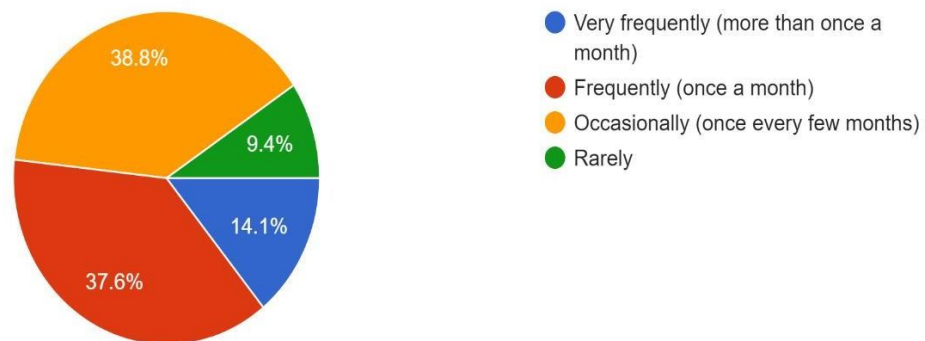
**Source:** Own Analysis

Almost half of the population invest through an online investment as it is very easy to invest in any fund online. Investors also prefer investing their fund directly through a financial advisors or brokerage firm which provide them proper research behind their prediction that satisfies investors need and also reduces the chance of loss.

**Fig 5.12** Changes in Mutual Fund Investments

How often do you make changes to your technology mutual fund investments?

85 responses



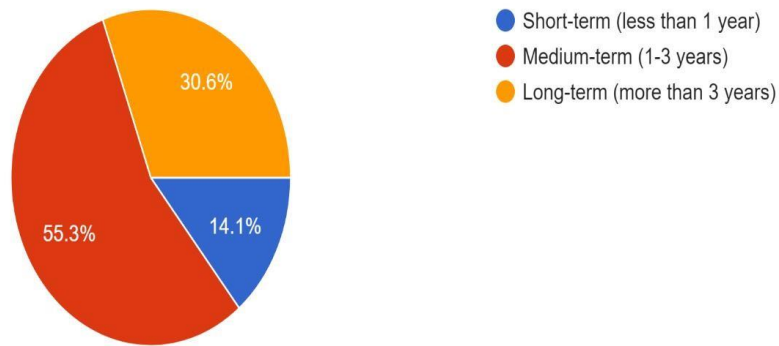
**Source:** Own Analysis

Investors occasionally change their investment due to many reasons like a news against that fund, continuous loss in that fund, investment firms changed by fund manager etc.

**Fig 5.13 Preferred Investment Duration**

What is your preferred investment duration for technology mutual funds?

85 responses



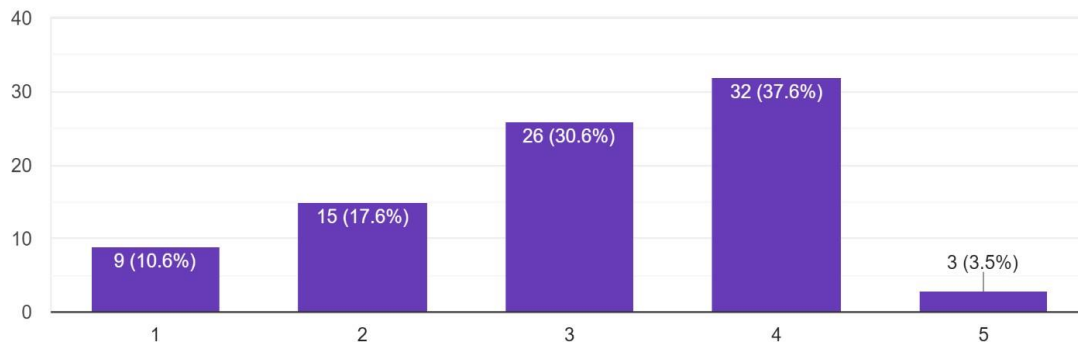
**Source:** Own Analysis

As per above more than half of the investors invest in this fund in Medium Term (1-3 year). Technology fund is one of the most growing funds in India and gives higher return as compare to other fund so investors invest in this fund to get more return in less time.

**Fig 5.14 Knowledge of Technology Mutual Funds**

How knowledgeable do you consider yourself about technology mutual funds?

85 responses

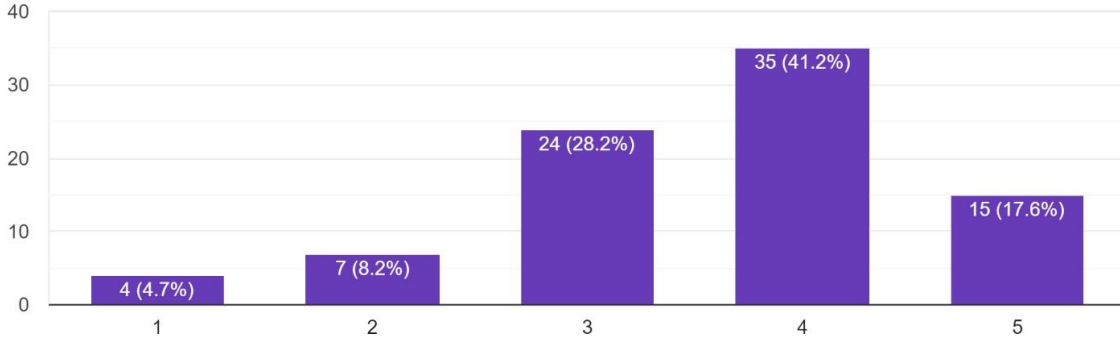


**Source:** Own Analysis

Investors have knowledge of technology mutual fund. Also, they know about the investment done by their fund manager in different firms and sectors so that they get maximum return from their investment.

**Fig 5.15** Reputation of fund house

How important is the reputation of the fund house when selecting a technology mutual fund?  
85 responses

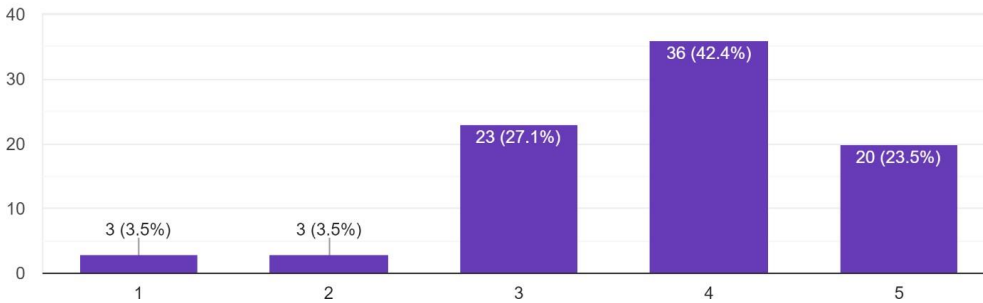


**Source:** Own Analysis

The reputation of the fund house can be an important factor to consider when selecting a technology mutual fund. A fund house with a strong reputation may be more likely to attract top investment talent and have better resources to support their investment team.

**Fig 5.16** Importance of Fund’s Manager Experience

How important is the fund manager's experience and track record when selecting a technology mutual fund?  
85 responses



**Source:** Own Analysis

When choosing a technology mutual fund, the track record and experience of the fund manager can be crucial considerations. The background and performance of a fund manager can reveal important information about their investment philosophy, decision-making process, and capacity to produce profits for investors.



### 5.3 Hypothesis Testing

#### Hypothesis 1

H0: There is no association of age and the goal to invest in technology mutual funds.

H1: There is association of age and the goal to invest in technology mutual funds.

**Table 5.8 Hypothesis Result 1**

**Case Processing Summary**

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
age * goal	86	100.0%	0	0.0%	86	100.0%

**age \* goal Crosstabulation**

Count

		goal			Total
		Long-term capital appreciation	Regular income stream	Short-term capital appreciation	
age	18-25	21	19	19	59
	26-33	11	4	1	16
	34-41	3	7	1	11
Total		35	30	21	86

### Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.821 <sup>a</sup>	4	.019
Likelihood Ratio	12.031	4	.017
N of Valid Cases	86		

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 2.69.

**Source:** Own Analysis

The outcomes of a chi-square analysis on a dataset are displayed in the findings. To evaluate whether there is a significant correlation between two categorical variables, perform the chi-square test.

In this instance, Pearson Chi-Square and Likelihood Ratio are the two test statistics that were generated by the analysis. The null hypothesis may be rejected because both statistics have 4 degrees of freedom and a p-value less than .05. This allows us to draw the conclusion that there is a substantial correlation between the two variables.

It is important to note that the minimum expected count is only 2.69 and that 4 of the 9 cells (or 44.4%) have predicted cell counts lower than 5. This suggests that the chi-square test's presumptions might not be true, which could produce false findings.

Therefore, care should be taken when interpreting these findings, and more research should be done to evaluate whether the chi-square test should be used on this dataset.

Finally, 86 valid cases make up the sample size for this investigation.

## Hypothesis 2

H0: There is no association between gender and the duration of investment in technology mutual funds.

H1: There is an association between gender and the duration of investment in technology mutual funds.

**Table 5.9 Hypothesis 2 Result**

### Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
gender * duration	86	100.0%	0	0.0%	86	100.0%

### gender \* duration Crosstabulation

Count

		duration			Total
		Long-term (more than 3 years)	Medium-term (1-3 years)	Short-term (less than 1 year)	
gender	Female	18	11	9	38
	Male	9	16	23	48
Total		27	27	32	86

### Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.010 <sup>a</sup>	2	.011
Likelihood Ratio	9.161	2	.010
N of Valid Cases	86		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.93.

**Source:** Own Analysis

The outcomes of a chi-square analysis on a dataset are displayed in the findings. To evaluate whether there is a significant correlation between two categorical variables, perform the chi-square test.

In this instance, Pearson Chi-Square and Likelihood Ratio are the two test statistics that were generated by the analysis. The null hypothesis may be rejected because both statistics have 2 degrees of freedom and a p-value less than .05. This allows us to draw the conclusion that there is a substantial correlation between the two variables.

Noting that none of the anticipated cell counts are below 5, which is a crucial presumption of the chi-square test, is also essential. Consequently, the analysis is accurate.

Finally, 86 valid cases make up the sample size for this investigation.

### Hypothesis 3

H0: There is no association between gender and how they manage risk in technology mutual funds.

H1: There is an association between gender and how they manage risk in technology mutual funds.

**Table 5.10 Hypothesis 3 Result**

#### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
gender * ManageRisk	86	100.0%	0	0.0%	86	100.0%

#### gender \* ManageRisk Crosstabulation

Count		ManageRisk				Total
		Consultation with a financial advisor	Diversification across multiple funds	Focusing on long-term investment horizon	Regularly reviewing and adjusting my investments	
gender	Female	6	16	9	7	38
	Male	15	7	11	15	48
Total		21	23	20	22	86

#### Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.453 <sup>a</sup>	3	.024
Likelihood Ratio	9.614	3	.022
N of Valid Cases	86		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.84.

**Source:** Own Analysis

The outcomes of a chi-square analysis on a dataset are displayed in the findings. To evaluate whether there is a significant correlation between two categorical variables, perform the chi-square test.

In this instance, Pearson Chi-Square and Likelihood Ratio are the two test statistics that were generated by the analysis. The null hypothesis may be rejected because both statistics have 3 degrees of freedom and a p-value less than .05. This allows us to draw the conclusion that there is a substantial correlation between the two variables.

Noting that none of the anticipated cell counts are below 5, which is a crucial presumption of the chi-square test, is also essential. Consequently, the analysis is accurate.

Finally, 86 valid cases make up the sample size for this investigation.

## **5.4 Findings and Recommendations**

### **5.4.1 Findings**

- **Age and Investment Goal:** The chi-square test results indicate a significant association between age and the goal to invest in technology mutual funds. This suggests that different age groups may have varying motivations for investing in the technology sector.
- **Gender and Investment Duration:** The chi-square test results reveal a significant association between gender and the duration of investment in technology mutual funds. This implies that gender may play a role in determining how long investors hold their investments in the technology sector.
- **Gender and Risk Management:** The chi-square test results demonstrate a significant association between gender and how investors manage risk in technology mutual funds. This suggests that gender may influence risk management strategies employed by investors in the technology sector.

#### 5.4.2 Recommendations

- **Targeted Marketing:** Considering the association between age and investment goals, fund managers and financial institutions can tailor their marketing strategies to specific age groups. This can involve highlighting the technology fund's features that align with the preferences and motivations of different age demographics.
- **Personalized Investment Plans:** Given the association between gender and investment duration, financial advisors can offer personalized investment plans based on gender-specific investment preferences. This can help investors, especially those belonging to different genders, align their investment strategies with their goals and timelines.
- **Risk Management Education:** Recognizing the association between gender and risk management, educational initiatives can be developed to enhance risk management skills among investors in the technology sector. These programs should consider the unique risk profiles and preferences of different genders to provide tailored guidance on managing risk effectively.
- **Further Research:** Considering the limitations of the chi-square test results, additional research should be conducted to validate the findings and explore the underlying factors influencing the associations observed. This can involve gathering a larger sample size and utilizing more robust statistical methods to ensure accurate and reliable results.
- Considering the association between age and the goal to invest in technology mutual funds, investment firms and fund managers should target marketing efforts towards younger age groups, particularly those in the 22 to 24-year-old range.
- Investment firms should recognize the association between gender and investment duration. Tailored investment strategies and products can be developed to cater to the specific needs and preferences of different genders.
- With the association between gender and risk management approaches, financial advisors and investment platforms should consider providing customized risk management solutions and guidance that align with the risk preferences and behaviors of different genders.

## 5.5 Limitations

- The study is subject to certain limitations such as the accuracy and completeness of the data provided by the sample, the potential for sampling bias, and the impact of external factors such as market conditions and regulatory changes.
- Self-reporting of the data used in the analysis raises the possibility of response biases. There is a chance that respondents will give false or incomplete information, which could cause errors in the analysis.
- The analysis relies solely on the data provided by the researcher without external validation or comparison to other datasets or studies. This limits the ability to confirm the robustness and reliability of the findings.
- The timeline for the data used for analysis is not stated. The analysis might not accurately capture the present dynamics of the technology mutual fund market because investment practices and market conditions are subject to change over time.



## CHAPTER 6

### CONCLUSION

Technology mutual funds are becoming increasingly popular among investors in India due to their potential for high returns. However, it is important for investors to have a good understanding of the risks associated with the technology sector before investing. Mutual funds are suitable for all types of investors, but investors with a good risk appetite may find sectoral funds to be the best option. Fund managers are experts in this area and invest funds in portfolios with the maximum returns possible according to the investor's risk appetite. Investors are putting more faith in mutual funds than any other financial product in the modern era.

Techniques used to evaluate performance, such as Treynor's, Sharpe's, and Jensen's approaches, indicate that the technology sector provides maximum returns with relatively low risk compared to the banking sector. To maximize returns, investors should constantly review their technology mutual fund holdings and make adjustments to their portfolios based on market conditions and fund performance. Mutual fund companies must educate and inform investors about the technology sector. To maximize returns, investors should diversify their portfolios and keep a close eye on their holdings. Technology mutual funds can offer larger returns with comparably lower risk than other industries, such as the banking industry, according to the performance evaluation of these funds using a variety of approaches. In general, investors who are willing to assume some level of risk in exchange for potentially higher returns may find that technology mutual funds are a good investment option.

The performance of technology mutual funds can be assessed using performance evaluation methodologies like Treynor's, Sharpe's, Jensen's, and tracking error. These evaluation methods show that, in comparison to other industries like banking, the technology industry has offered the highest profits with relatively low risk. Therefore, investing in technology mutual funds might be a smart alternative for investors seeking higher returns who have a high tolerance for risk and solid knowledge of the technology industry.

## **6.1 Suggestions**

**Risk Appetite:** Investors should be well-aware of the hazards related to the technology industry prior to investing in technology mutual funds. They ought to be ready for increased volatility and possible losses.

**Diversification:** Investors shouldn't invest their entire portfolio in mutual funds for technology. To lower overall risk, it is crucial to diversify their portfolio by making investments in different industries and asset types.

**Time Horizon:** Investments in technology mutual funds should be undertaken with a longer time horizon because the industry is evolving quickly. Investors should exercise patience and avoid panicking during brief market changes.

**Research:** The mutual fund's investments in technological businesses should be thoroughly researched by investors. They ought to consider the business's management, finances, and possibilities for expansion.

**Fund Manager:** Making investing decisions should consider the fund manager's track record and prior expertise managing technology funds.

**Technology Knowledge:** To make wise investment selections, investors should have a basic understanding of the technology industry. They must stay current on the newest technical advancements and trends.

**Technology Awareness:** Through training programs, webinars, and seminars, technology mutual fund companies should educate investors about the area.

**Transparency:** Companies that offer technology mutual funds should frequently disclose pertinent information about the funds, such as the portfolio composition, fees, and expenses.

**Monitoring:** To maximize returns, investors should constantly review their technology mutual fund holdings and make adjustments to their portfolio based on market conditions and fund performance.

**Disclosure of Risk:** The risk associated with sectoral equity schemes should be disclosed to the investor by the fund manager. The portfolio manager is required to provide all pertinent fund-related information.

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## ANNEXURE

# Investor's Attitude & Perception Towards Technology Fund

Dear Respondent,  
Greetings!

The following questionnaire is intended to study the "Investor's Attitude & Perception Towards Technology Fund". This survey is a part of my MBA Dissertation research work. The data collected for this study is exclusively for academic and research purposes.

Age \*

- 15-18
- 19-21
- 22-24
- 25-30
- 30+

Gender \*

- Male
- Female

If you have invested in a technology mutual fund, what motivated you to invest in it? \*

- Potential for high returns
- Attractive investment proposition
- Recommendation from financial advisor or friend/family
- Interest in the technology sector
- Other (please specify)
- Other: \_\_\_\_\_

How do you typically research and evaluate technology mutual funds before making an investment decision? \*

- Conduct my own research using online sources
- Seek advice from a financial advisor
- Rely on information from the fund company or a financial institution
- Use a combination of the above
- Other (please specify)
- Other: \_\_\_\_\_

Which of the following factors do you consider most important when selecting a technology mutual fund? \*

- Past performance
- Expense ratio
- Investment strategy
- Risk level
- Portfolio allocation
- Other (please specify)
- Other: \_\_\_\_\_

What is your investment goal when investing in a technology mutual fund? \*

- Short-term capital appreciation
- Long-term capital appreciation
- Regular income stream
- Other (please specify)
- Other: \_\_\_\_\_

How do you stay informed about developments in the technology sector? \*

- By reading financial news websites
- By following technology-related blogs and social media accounts
- By attending seminars and conferences
- By consulting with a financial advisor
- Other (please specify)
- Other: \_\_\_\_\_

How often do you review your investments in technology mutual funds? \*

- Daily
- Weekly
- Monthly
- Quarterly
- Annually
- I do not review my investments regularly

How do you manage risk when investing in technology mutual funds? \*

- Diversification across multiple funds
- Focusing on long-term investment horizon
- Regularly reviewing and adjusting my investments
- Consultation with a financial advisor
- Other (please specify)
- Other: \_\_\_\_\_



What type of information would you like to have before investing in a technology mutual fund? \*

- Historical performance data
- Investment strategy and philosophy
- Fund manager's track record
- Holdings and portfolio allocation
- Risk metrics
- Fees and expenses
- Other (please specify)
- Other: \_\_\_\_\_

How do you assess the risk associated with investing in technology mutual funds? \*

- By reviewing the fund's risk metrics
- By consulting with a financial advisor
- By diversifying my investments across multiple funds
- By investing only in low-risk funds
- Other (please specify)
- Other: \_\_\_\_\_

What is your preferred mode of investing in technology mutual funds? \*

- Directly through the fund house's website
- Through a financial advisor or brokerage firm
- Through an online investment
- Other (please specify)
- Other: \_\_\_\_\_

How often do you make changes to your technology mutual fund investments? \*

- Very frequently (more than once a month)
- Frequently (once a month)
- Occasionally (once every few months)
- Rarely

What is your preferred investment duration for technology mutual funds? \*

- Short-term (less than 1 year)
- Medium-term (1-3 years)
- Long-term (more than 3 years)

How knowledgeable do you consider yourself about technology mutual funds? \*

- |              |                       |                       |                       |                       |                       |               |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|
|              | 1                     | 2                     | 3                     | 4                     | 5                     |               |
| Incompetence | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Knowledgeable |

How important is the reputation of the fund house when selecting a technology mutual fund? \*

	1	2	3	4	5	
Not Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

How important is the fund manager's experience and track record when selecting a technology mutual fund? \*

	1	2	3	4	5	
Not Important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important

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