

**Role of Technology in Investment Management by Women Employees of IT & ITES Sector in Pune****Ms. Supriya Lakhangaonkar****Research Scholar – Department of Business Management and Business Administration, RSTM Nagpur University****Dr. Prasanna Deshmukh****Principal and Head at Anantrao Thopte College and Research Centre, Bhor, Pune**

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**Abstract –**

*Information and communication technology play a critical role in imparting investment decisions. Good internet connectivity has encouraged search, awareness and research about various investment avenues and resulted in growth in online investments.*

*This paper examines the role of technology in investment management by women employees of IT & ITES sector. Here, under information technology the researcher has considered use of wireless technology or devices such as mobile phones/smart phones, I pad/Tables, Desktop/laptops with internet connectivity in investment planning, execution and review.*

*A sample size of 120 women employees of IT and ITES sector was selected. The data was collected through a well designed and structured questionnaire. The respondents were asked about role of technology in investment management, problems faced while using technology in investment decisions and types of online investments. The results were analyzed and suitable conclusions were drawn.*

**Key Words – Information Technology, Women Employees, Investment Management, Financial Products, IT & ITES Sector, Online Investments**

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## **1. Introduction**

Currently, India's domestic savings as a percentage of its GDP is 28%, which is one of the highest in the world. By 2008-09, India's total annual personal disposable income has grown to Rs. 36,059 billion (about 52% being Urban) and annual savings have grown to Rs. 9,239 billion (source- Report by Indicus Analyst, a research firm). With this positive change in income and saving level, the role of technology in investment management and widening investment product range, it is significant to study the management of investment by an individual. At any given point of time, majority of retail investors especially women investors are confused about the investment chooses because of different risk return trade off of different investment avenues. Communication and information technology can prove to be a boon for investment management and overall awareness about financial products, intermediaries and markets.

Technology is an important part of the context in which we live. Today in India, More than 100 million people have internet connection. Indian's spend more time on internet than watching television. India is the third largest user of social networking sits like Facebook.

But what does it mean for financial services? With the rise of personal computers in late 80s and early 90s, online trading platforms emerged. Better computing and information flows led in high-frequency trading, forex shops, and hedge funds. Broader applications of technology on the backend of brokerages created new products like Equity Traded Funds. All of these developments have pushed customers into different ways of investing.

Today, more than 45% of internet users search for financial services and insurance as a category. Most of Indian internet users transact and pay bills through net banking, make fixed deposits. All mutual fund houses and insurance companies in India offer online products.

Now, this betterment is leading the next technology evolution with automated investment. Financial institutions are building on prior innovation and applying technology in new ways to change the way money is managed so that ultimately people have better outcomes.

Thus, information technology has aided investment management in varied ways. Here under information Technology the researcher has considered wireless technology or devices such as mobile phones/smart phones, I pad/Tables, Desktop/laptops with internet connectivity.

## **2. Role of Technology in Investment Management**

Following are the prominent areas where information technology plays a supporting role in investment planning, execution and review.

### **2.1 Buy or Sell Investments**

There are various products available online. One can buy or redeem Fixed Deposits, Mutual Funds, Insurance, Equity Shares and Equity Traded Funds with the help of online services offered by financial institutions.

As per the data available with Bank Bazaar - the online portal for fixed deposits, there are 11 cooperative banks, 6 foreign banks, 19 Indian private sector banks and 26 nationalized banks that offers online fixed deposits to their clients. Theses online fixed deposits can be booked through website of a particular bank or an investor can make a comparison of rate of interest offered by different banks on third party portal and then decide on investment through these portals.

As per the data available on Fundsindia, there are 44 Mutual Fund Houses (Asset Management Companies) operating and offering online mutual fund currently in India. Online mutual fund platforms are fast and convenient. An investor can compare the fund performance conveniently on online financial information sources and independent portals like Moneycontrol, Fundsindia etc. and then, can buy on a website of a respective AMC or through these independent portals or online broker platforms like ICICI Direct, MyUniverse by Aditya Birla Group etc.

Life Insurance, originally, a risk minimization tool, penetrated as a long term investment product in India has a multiple distinct features for comparison. Policy Bazaar – online portal for life/health/vehicle/travel/home insurance, offers more than 250 plans from 33 insurers. Total 14 insurance companies in India offer online term plan.

According to a Boston Consulting Group (BCG) Report – “Insurance @ digital–20X BY 2020”, online insurance market in India is already in excess of Rs.700 crore. While life insurance sales contribute around Rs.300 crore, motor insurance around Rs.250 crore, other insurance lines such as health and travel make up around Rs.150 crore. It is estimated that by 2020, three in every four insurance policies would be influenced by digital channels during the pre-purchase, purchase or renewal stages, the BCG report added. Though better pricing is a key reason for buying online, convenience and increased transparency are critical factors as well. Life insurance related queries have grown by over 450 per cent over the last five years. It is estimated that 75 per cent of the business will be attributed to insurance's digital footprint in 2020.

With daily-traded volumes more than tripling online share trading in India seems to have arrived. The share of online trading, as a percentage of overall traded volumes, has also risen dramatically from 7% last year to 20% in the year 2006.

After online trading in shares, it's time for the smart phone. The mobile phone allows you to trade at your own convenience — while travelling or even while snacking at a restaurant. Turnover of share trading via mobile devices has increased more than four times in the last two years.

Turnover on account of trades undertaken through securities trading using wireless technology or devices such as mobile phones, laptops with data cards etc which use internet protocol, in cash market of NSE and BSE are –

Year of Trading	Turnover (rupees in crore)	Growth in turnover (%)
2012-13	19,871.2	-
2013-14	38,523.54	93.91
2014-15	90,597.98	135.18

Source – Parliament Questions

## 2.2 Search, Awareness and Research

India's base of about 120 million Internet users is currently the third-largest in the world. Though India's users spend less time online per capita than users in developed countries, their pattern of online behaviour is rapidly converging. The Internet's role in communication, social networking, and informing and influencing India's consumers in categories such as apparel, books, financial services, and travel is already comparable with that of developed countries. The share of Indian digital consumers who use online media for search, awareness, and research to purchase products is already high across multiple categories: in travel (51 percent), books (36 percent), **financial services (30 percent)** and apparel (26 percent) the proportions are comparable with those in Germany, Japan and the United States.

### **2.3 Investment Analysis or Management Software**

The 4 major Portfolio management software's in Indian market and used by thousands of people are Perfios, mProfit, Investplus and Intuit MoneyManager. These software provides data security, excel version facility and are easy to use. All are paid software, annual subscription ranging from Rs. 365 to Rs. 1999 per year.

A lot of people don't go for advanced tools with subscription fees but prefer to use free tools available in market which does a good enough job. Tools like money-control tracker and Valueresearch online tracker are used by lacs of people to track their mutual funds and stock holdings. But they do not give investor all the functionalities which fully fledged software's can provide. Arthamoney and Moneysights are two more popular free online tools of portfolio management to add to the list.

### **2.4 Personalized Market Watch Websites**

List of Popular Personalized Market Watch Websites used by thousands of retail investors in India.

- Zerodha Pi
- Angle SpeedPro
- Motilal Oswal Desktop Training
- Upstox
- Sherkhan Trade Tiger
- ICICI Direct Trade Racer
- India Infoline Trade Terminal
- Kotak Keat Pro X
- HDFC Securities Blink
- NSC Now

### **3. Research Objectives**

1. To study the role of technology in investment management.
2. To bring out problems faced by women employees in IT & ITES sector while using technology in investment decisions.
3. To know about women investor's online investments.

### **4. Research Methodology**

- Population: Women working in IT & ITES sector in Pune city.
- Sample: Women employees of IT & ITES sector having some form of investment.
- Sampling Technique: Convenience Sampling
- Sample Size: 120 Women Employees
- Tools Used:
  - A structured questionnaire was designed and distributed among women employees.
- Data Collection:

This study is mainly based on primary data collected through a well designed and structured questionnaire. The secondary data was collected mainly with the help of online surfing of various research papers, news articles and publications.

## **5. Data Analysis and Interpretation**

### **5.1 Demographic Profile of Respondents**

#### **5.1.1 Age**

Age indicates the level of maturity and experience of an individual. Age of the respondents is one of the most important characteristics in understanding views and opinion of an individual about particular factors.

Primary data reveals that out of 120 respondents 25 % of respondents belongs to age group 18-25 years, 56% belongs to 26-35 age group. 17% respondents are in the age bracket of 36-45 years and remaining 3% are of age group 46-55 years. Thus, analysis of age profile indicates that the age group 26-35 years constitutes a major age group among IT women employees. It accounted for 56% of the sample. This is an age group of reasonable income and experience.

#### **5.1.2 Marital Status**

In India, Marriage is one of the most important social institutions. Marriage makes a person little more responsible and matured. It also changes the spending and saving pattern of an individual.

Primary data indicates that out of 120 respondents 41% respondents are single while 59% respondents are married. Out of these 59% respondents, 23% respondents have no kids whereas 36% respondents have kids in their family. Thus, analysis of marital profile indicates that almost equal representation is given to married and unmarried respondents in the sample. It has been observed from primary data that the marriage age has extended above 26. A considerable number of women respondents from age group 26-35 are single.

#### **5.1.3 Educational Qualification**

Education influences an individual's awareness and knowledge level as well as develops his attitude and opinion.

It is good to see from the primary data that 51% respondents are post graduate and 38% are graduates. 9% i.e. 11 respondents have professional qualification while 2% holds diploma in engineering. Education is one of the social indicators. The above data reveals that out of 120 respondents, 60% women possess post graduate degree or are professionally qualified. This is a great sign of growing recognition among women about higher qualification.

#### **5.1.4 Annual Income**

Income of an individual plays an important role in his spending and saving habits. It also decides the socio-economic status of an individual.

Majority of the respondents i.e. 58%, belongs to income group up to 5 lakh whereas 18% are from income group 5-7 lakh. Income bracket 7-10 lakh and 10 lakh and above consist of 13% and 12% respondents respectively. Thus, 43% respondents earn more than 5 lakh per annum which is a quite higher income and favourable condition for investments in various avenues.

## 5.2 Role of Technology in Investment Management

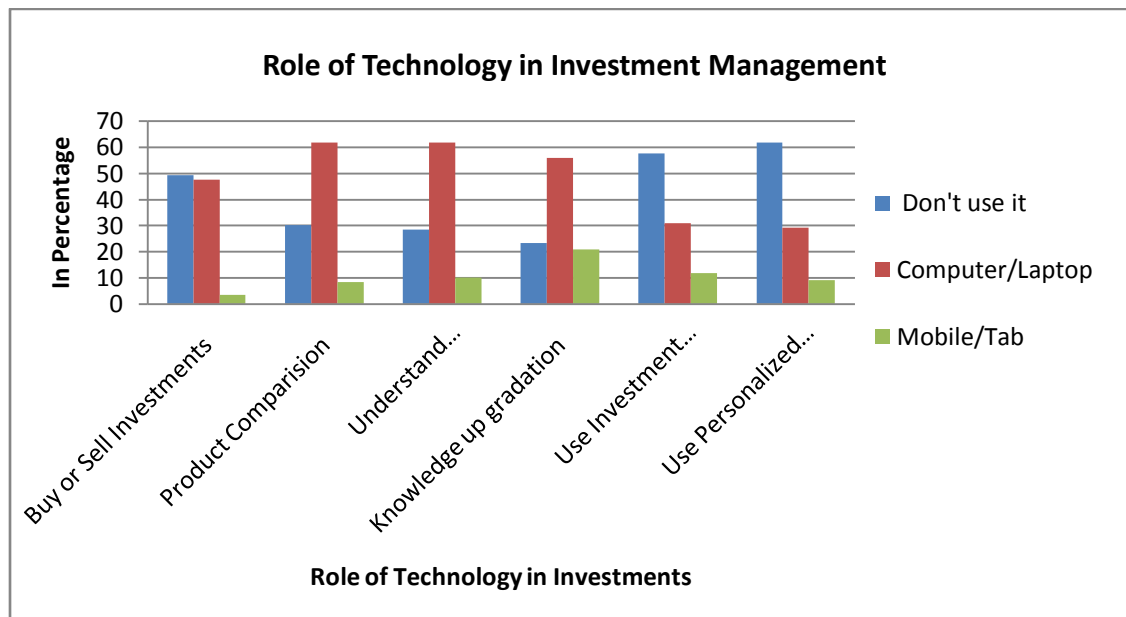
The respondents were asked regarding how do they use technology to aid their investment management. Under Investment Planning stage, do they use Computer/Laptop or Mobile/Tab for Product comparison, better understanding of company/ product etc? Next stage is of execution, the respondents were asked whether they buy/sell investments online and finally for review and revision stage, do they use investment analysis/ management software and/or personalized market watch websites.

**Table 5.2.1: Role of Technology in Investment Management**

Role of Technology in Investment Management	Don't use it		Computer / Laptop		Mobile / Tab		Total
	No.	In %	No.	In %	No.	In %	
Buy or Sell Investments	59	49	57	48	4	3	120
Product Comparison	36	30	74	62	10	8	120
Understand Company/Product	34	28	74	62	12	10	120
Knowledge up gradation	28	23	67	56	25	21	120
Use Investment Analysis or Management Software	69	58	37	31	14	12	120
Use Personalized Market Watch Websites	74	62	35	29	11	9	120

(Source – Primary Data)

**Chart 5.2.1: Role of Technology in Investment Management**



The Table and Chart 5.2.1 indicates that out of 120 respondents 48% make use of internet through computer/laptop to buy/sell investments while 49% respondents don't use technological aid for buying and selling. Only 3% respondents use mobile/tab.

Use of technology for product comparison has shown an encouraging response. 62% respondents use computer/laptop for product comparison while 8% respondents use mobile/tab for the same. Only 30% respondents don't do online product comparison.

62% respondents do online surfing through computer/laptop for better understanding of company and financial product while 10% use mobile/tab for the same. Only 28% respondents don't do online surfing for understanding company/product.

56% respondents do online browsing for overall knowledge up gradation in the field of investments through desktop/laptop while 21% use mobile/tab for the same. 23% respondents doesn't use internet for financial knowledge up gradation.

Use of investment analysis/ management software is not up to the mark. 31% respondents use it through computer/laptop and other 14% use it through mobile. Another 58% respondents don't use it at all.

Majority of respondents i.e. 62% doesn't use personalized market watch websites. While 35% respondents access it through computer/laptop and 11% access it on mobile/tab.

### **5.2.2 Problem with Online Investments**

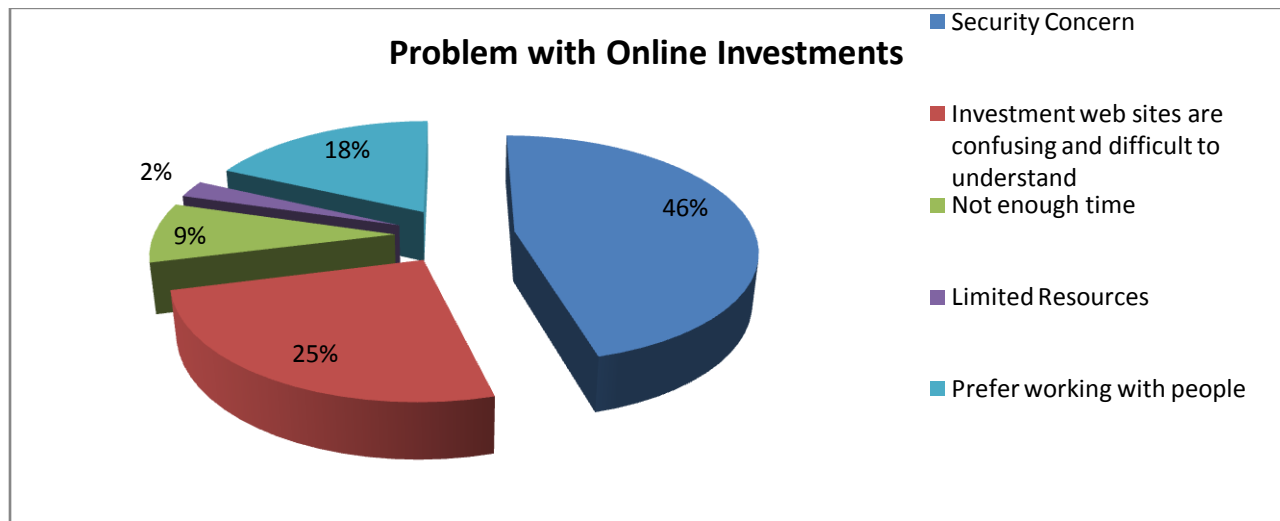
The respondents were asked about the problem with online tools for investment management. From the Table and Chart 5.2.1, it is clear that around 50% respondents don't use information and communication technology to the fullest, when it comes to investment decision making. This is somewhat surprising as respondent's career/ profession is in the area of information and communication technology. This clearly reflects that majority of respondents has not incorporated IT in their personal investment decision making.

31% respondents don't face any problem while 69% i.e. 83 respondents face different types of problems while investing online. To find out the reason behind this, the respondents were asked regarding problems they face with online investments. The responses are presented in the following table.

**Table 5.2.2: Problem with Online Investments**

<b>Problem with Online Investments</b>	<b>No. of Respondents</b>	<b>In %</b>
Security Concern	38	46
Investment web sites are confusing and difficult to understand	21	25
Not enough time	7	8
Limited Resources	2	2
Prefer working with people	15	18
<b>Total</b>	<b>83</b>	<b>100</b>

**(Source – Primary Data)**

**Chart 5.2.2: Problem with Online Investments**

The Table and Chart 5.2.2 indicate the prominent reasons are security concern and confusing investment websites. 46% respondents are worried about cyber security. 25% respondents feel that investment websites are complicated and they don't understand the financial language. Here is the need of financial awareness programmes by Government and Financial Institutions. 18% respondents prefer working with people while 9% face time management problem. Only 2% respondents face infrastructural problem .i.e. limited resources.

### **5.2.3 Online Investments**

It is clear from table and chart 5.2.1 that approximately 50% of respondents do online buying and/or selling mainly through computer/laptop. The respondents were asked which investment products they buy/sell online. As an individual can buy more than one type of investment online, the respondents were allowed to do multiple ticks. The responses are presented in the following table.

**Table 5.2.3: Online Investments**

Online Investments	No. of Respondents	In %
Online FD	48	79
Online Mutual Fund/SIP	22	36
Online Life Insurance/ ULIP	10	16
Online Share Trading	8	13

(Source – Primary Data)

**Chart 5.2.3: Online Investments**



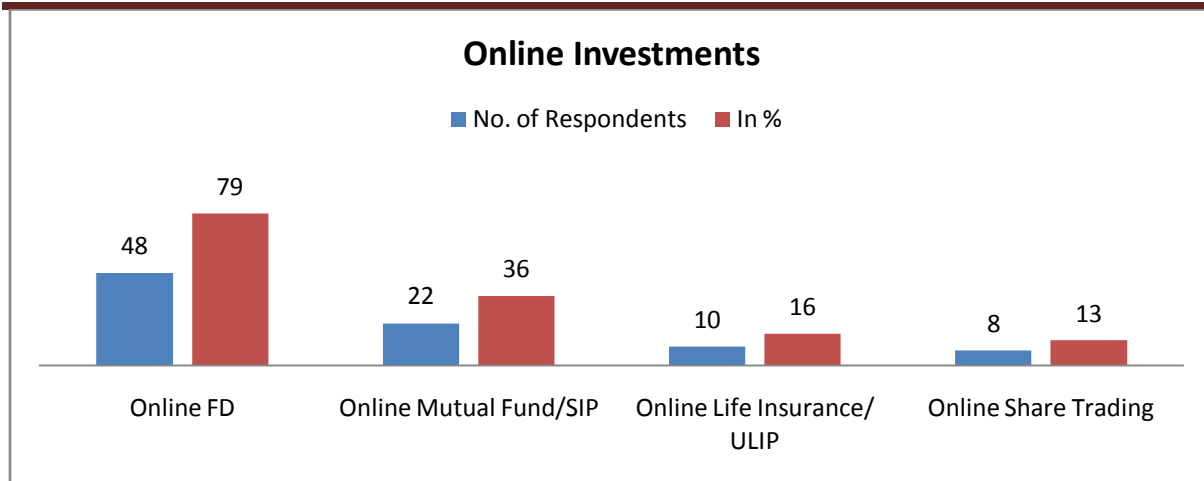


Table and chart 5.2.3 reveals that respondents are more comfortable and active with online Bank Fixed Deposits as 79% of respondents book online FD. The next preferred online investment is Mutual Fund. 36% of respondents buy/sell mutual funds over internet while 16% respondents buy paperless insurance plans. 13 % respondents are active in share market and buy/sell equities through online platform.

## 6. Findings

### 6.1 There is a mix response to offline and online investments.

49% respondents don't opt for online investments while 51% buy/sell investments online. Thus, there is almost equal preference to online and offline investments.

### 6.2 Information and communication technology play a key role in information gathering.

Approximately 80% respondents use internet for information collection about company/product/product comparison/ knowledge up gradation etc. But when it comes to actual buying and selling, 50% respondents has chosen online path.

### 6.3 There is less awareness and use of investment analysis /management software and personalized market watch websites among IT/ITES women employees.

Approximately 40% respondents are aware of and make use of investment analysis /management software and personalized market watch websites. At the time of data collection, the researcher has observed that majority of respondents has not even heard about these investment analysis tools.

### 6.4 High proportion of women working in IT/ ITES sector face problem while making online investments

Surprisingly only 31% respondents don't face any problem with online investments another 69% has come across varied difficulties while making online investments.

### 6.5 The prominent problems faced in online investments are - security concern and confusing investment websites.

46% respondents are worried about cyber security while 25% respondents feel that investment websites are complicated and they don't understand the financial language. Here is the need of financial awareness programmes by Government and Financial Institutions.

### **6.6 Clear preference to online fixed deposits over other financial products.**

Out of 51% online investors, 79 % i.e. 48 respondents book online fix deposits with banks. This shows a clear preference to online FD over other financial plans.

## **7. Suggestions**

### **7.1 To Women Employees of IT / ITES Sector, Pune.**

#### **▪ Increased use of internet in investment management**

Women working in IT/ITES should make use of internet to the fullest for financial awareness and knowledge up gradation. They should not only stick to information gathering but try out online investments. As it will a most convenient and time saving way of investment for them. With the help of information technology one can not only buy/sell investments but can also keep a track of investments and analyse it with expert software. This can prove to be a handy tool of timely review and revision of investments.

Thus, there is need to incorporate technology in all the steps of investment management process i.e. planning, execution, reviews and revision.

### **7.2 To IT/ITES Companies in Pune.**

#### **▪ Investor's Education Program**

Financial institutions and market regulators have realized the importance of educating women workforce as they are expected to be matching with men in terms of numbers and income, if not sooner, but certainly later. Hence, Investor's Education Programs are organized by many financial institutions like Mutual Fund Houses, Private Broking Firms, Life Insurance Companies etc. As a part of Employee Wellness Programs, HR manager can organize the financial awareness programs/online interactive sessions / workshops on market web watch to boost the financial literacy and confidence level of women employees.

## **8. Conclusion**

Primary data clearly signifies that women employees of IT & ITES sector are using technology in investment management mainly for financial knowledge up gradation. It an encouraging fact that about 80% of them make use of technology for understanding financial products/market and 50% use it to buy/sell investments online. Security issues and less awareness about financial terms on websites are the main problem faced by majority of respondents. Online fixed deposit is the most favoured online investment avenue among women employees of IT and ITES in Pune.

Extended use of technology by women employees and arrangement of investor's education programmes by IT/ITES Company can boost the investing habit among women employees and can make them more committed and serious about their investment portfolio. Thus, the nation can benefit from disciplined flow of savings into an economy.

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