THE ROLE OF TECHNOLOGY IN MUTUAL FUNDS

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INTRODUCTION

One doesn't have to go to the bank anymore for routine transactions like with drawing or depositing money—sowhy should you have to go to amutual fund(MF) invest or service center to buy or sell unit so fascheme? That is the driving idea behind remote servicing being ushered in by mutual funds and their registrar & transfer (R & T) agents. From toll free phone lines where customer scan call to inquire a bout the status of the iraccount, check the latest NAVand even place some non-financial requests, to transaction enabled sites where you can buy and sell your units with the touch of a button, mutual funds are rolling out their virtual red carpet for you in the Cyber space.

Technology has been one of the key drivers behind the growth of mutual fund industry. Technology has enabled the industry to improve the quality of customer service, enhance information flow to portfolio managers, copewith exploding volumes of transactions, and introduce a broad array of new products. Moreover, technology has allowed the mutual fund industry to do all these things at a reasonable cost-after making substantial capital expenditures for the technology. This is largely because expensive labour intensive functions have been replaced by automated systems thatrely on ever-cheaper hardware and communication channels.

The World Wide Web (WWW) presents an opportunity for new businesses and a challenge to the dominant players of the securities industry.

The battalions of customer representatives and the huge investment in capital equipment that now support large financial players present significant barriers to entry for newcomers. By contrast, a smaller fund sponsor can easily establish investment than was previously possible. The new technology is also driving down commissions and other fees, however the resulting lower margins may favour large suppliers who can use their size to achieve economies of scale.Thefundshavetomodernizethecomputersystemsso that information will be made available at thefingertips.

OBJECTIVES

Objectives of this Research Paper are

(1) To highlight the role of computer technology in the growth and performance of mutual funds.

(2) To suggest some inputs necessary for designing an online trading website in India.

(3) To give suggestions for further incorporation of technology into mutual fund complexes in order to improve their performance.

HISTORY OF COMPUTER AND INVESTING

As the amount of information and news affecting the Investment world has grown, so has the need for sophisticated electronics tools to keep track of it all. Since the dawn of investing, sophisticated market participants have used computing tools to gain an advantage over the competition. Today's worldwide financial system would be helpless without electronic assistance. So how did this relationship develop over the last 20 years? The large Investment banks and trading houses such as Goldman Sachs, Salomon Brothers, and Merrill Lynch, have had mainframe computers and State-of-the-art equipment tracking the markets for them for decades. The nature of finance where split of seconds and accurate data can mean millions –kept it on the cutting edge of technology. But only since the dawn of the personal computer in the mid-1980's have the tools needed for extensive technical and fundamental research been availale to smaller investors.

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Beginning in 1985, discount brokers such as Charles Schwab and Quick and Reilly (who remainstill remain at the forefront of technology) began offering discounts for customers who used PC to place orders. The PC, and then the spread of online services ruled the trends. Things have come along way. It was recently estimated that approximately 30 to 40 percent of investment trades would be transacted over the Internet within the next ten years. Of the estimated 130 million mutual funds account open in the United States, up to half of these should be able to place transactions online by the end of 2002. And while mutual fund investors have traditionally lagged behind individual brokerage account customers in adapting to new technology, this is beginning to change.

ON LINE TRADING The floor of the traditional stock exchanges seems to be a chaotic market place. Mysterious to an outsider hand signals are employed, coded messages one electronic tickers appear and change at a frantic pace and the hand signals are employed so to compete to be heard above the flurry of activity . Today however, many people are bewildered by the stock market are investing in stocks. Why? For one thing, the Internet have investors to access in moments financial news, investment advice and stock brokers. For individual investors online investing is the new frontier, the new gold rush, the freedom to be you, with opportunity to become financially independent while working at home.In India,

Securities and Exchanges Board ofIndia (SEBI) allowed its registered brokers to offer on-line trading from January 31st 2000. Following this order,more than 25 different on-line brokerage houses have been registered on the NSE. This large number is indicative of the interest that on-line broking has stirred in India's financial community. On February 2000, Geojit Securities Ltd., a Kochi-based share broking firm became the first company in the country to offer trading in security through Internet .Since then, others ranging from large Institutions such as ICICI to much lesser known start-ups have all entered the tray.The advent of online broking is expected to have a wide-ranging impact on the India financial markets with increased retail participation, reduced costs, greater transparency and enhance liquidity.

COMPUTER IN PERFORMANCE EVALUATION OF MUTUAL FUND PORTFOLIO Computers have made their greatest contribution in the evaluation and comparison of portfolio performance.This ranges from recording the daily progress of their portfolios by a mutual fund, to sophisticated systems for evaluating portfolio performance that are sold by certain brokerage firms. In evaluation and comparison, computer allow one to generate wealth of ex post performance data and comparison standards reflecting many investment horizons, reinvestment assumptions and investment parameters such as taxes loading charges and brokerage fees

SOFTWARE

The Dartmouth library in the USA has a computer program called FUNDPRO that analyses the performance of open-end investment companies. It draws upon access files of annual data for 178 open-end funds and monthly files for 68 funds.

Program FUNDPRO calculates

1.The average rate of return earned by each fund
2.The variability of the rate of return for each fund
3.The risk measure that the analyst selects
4.The Treynor index for each fund
5.The Shape index for each fund.

It gives a detailed Treynor analysis that shows the Treynor index for each fund, its ranking index, the slope Of the characteristic line, a t-ratio text between slope unity, the intercept of the characteristic line, and a t- ratio test of the difference between the intercept and the risk free rate. FUNDPRO also gives a detailed printout of Sharpe's analysis. It will show the average rate of return for each fund, the Sharpe index, the ranking by this index, and the variance and standard deviation of the return.

A portfolio manager is required to specify the following inputs:

1. Whether he wishes to utilize annual or monthly data
2. The time period to be considered
3. Whether a loading charge is to be considered
4. A risk-free lending rate
5. The appropriate income tax rate

6. The capital gains tax rate.

The Portfolio manager can select from the following risk measures:

1. The standard deviation
2. The mean absolute deviation of returns
3. The slope characteristic line
4. The coefficient of correlation
5. The standard error of the estimate around the characteristic line.

SUMMARY OF FINDINGS AND FUTURE DIRECTIO

The following observations were made from the study:

The early entrants have an advantage by earning very high margins, which finance their startup costs, marketing sand establishment of Brand name. Companies with already established brand names appear to have an advantage and are able to acquire customers at a lower cost. New competitors are at a disadvantage because the lower commission rates do not allow them to generate the cash flow needed to acquire new customers. The established players have already achieved economies of scale that make their customer base more profitable than that of the new entrants.

Future Scenario

few years back the Internet was simply the playmatter of tech-heads and academics. From Corporate Intranet, which is used for everything to enhance team communications to recruitment , to whole new departments being created for the purpose of e-commerce today the intemet/intranet/extranet all three- is probably the most critical component of most information technology (IT) shops.

But there is a lot more new information technology out there than just the Internet. There is an explosion of information just ready to be tamed by the new intelligent agents ready to take on such diverse functions as data mining and customer profiling

These trends helps in accelerating the technology which will continue to be a major factor improving the mutual fund industry. While no one can predict the future with absolute accuracy, some potential recommendations and directions can be incorporated:

The Maturation of Voice Recognition System will bring new case of use and capabilities to voice case response unit (VRU) systems. Systems are already in place that permits customers to identify themselves by speaking a pre-arranged password into a phone, thus providing both memory- based and biometric security with greater convenience than today's PIN numbers. A client can then proceed to ask basic questions about equities and mutual funds by speaking in a phone by stating the names of the financial instruments. In the future, these systems will permit navigation by natural language recognition; instead of "press 1

for this, press two for that the customer will simply be able to say " I want to buy units of this mutual fund X" and the system will respond accordingly.

The increased productivity of these new programming systems will power a new of automation that will further drive down costs for the mutual fund industry.

The Internet will join hands with other consumer media, so that it will become possible for a TV commercial featuring a Mutual fund to end with an invitation to "Click here" to open an account.

People will always be the most important part of the mutual fund industry, but in the future, technology will change the nature their work. Transaction processing account queries, account setup, and asset allocation planning will increasingly be taken over by investors themselves, supported by the fund sponsor's representatives acting as advisors and guides for focused Fund.

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