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RESEARCH ARTICLE

ANALYSIS OF THE CONTRIBUTION OF INFORMATION TECHNOLOGY IN INVESTMENTS

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Abstract

This research paper is made with the view of analyzing the contributions of technology in investment sector. Furthermore it tries to answer the big questions like 'whether technology help to get higher returns from the investments in the stock market?' or 'what is next in investing?' or what is the role of technology in investment banking?.

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Introduction:-

It is well settled that technology enables the transformation of any business. With the advent of better technological models, the older business models are declining. The investment sector has a business environment that is dynamic in nature and is responsive to data capture, processing of data, sharing information, storing information, etc. Talking about businesses, what is the major advantage that any company has over its competitor? The answer is time, or let us say, speed in the execution of tasks. This is where information technology comes into the picture.

Using the traditional methods, the investment industry can definitely function without the usage of technology, but the investing experience would differ drastically. From time to services, technology totally improves the investment structure. Some authors say that technology can become the bedrock of the investment industry in recent years. It renders a medium through which the investors are able to know about the delivery of data, changes or shifts in the market, keeping a track of the potential or existing clients, and majorly for advertising to the public about the availability. The presence of automated systems in the investment structure for gigantic calculations, consolidations, and imparting knowledge is a far better system than the traditional way of investment.

In today's market situation, trading thrives on technological advancements since it transforms a strategy into a profit. Technology is radically altering our relation with monetary instruments. As a matter of fact, technology not only influences investment but also the manner in which people manage their money. In this generation, where the lives of people are fast-paced to an extent where they lack personal time as well, the revolution of information technology has resulted in saving time of the investors in investment activities. Information technology plays a central role in adapting to competitiveness and focusing on the nexus between foreign direct investment and domestic technological efforts.

Research Methodology:-

Scope of the Study:

This study is conceptual and descriptive in nature, thus, it expresses the views and opinions of the author and some other reputed authors. This study is done keeping in mind the importance of the discussion of investments in the present era as it affects the country's economy and development directly. Demands for better norms for ensuring sound technological needs are increasing day by day and in such a scenario this study will contribute to the transformation of knowledge and activities towards the betterment. Also, this study will showcase the impact of

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information technology in the investment industry. All this is done by the author with a central goal, for coming up with remedies and suggestions that can promote investment education as much as possible

Data Collection sources:

This data in this study has been collected primarily from secondary sources. The secondary data has been gathered from various sources including a review of literature, websites, reports, newspapers, articles, books, and journals. The proposed study is explanatory in nature and hence uses quantitative as well as qualitative data for proper interpretation.

Method of analysis:

The author has inclined to follow doctrinal research with the help of various statutes, judgments, commentaries, reports of various journals, articles in financial journals, periodicals, newspaper articles, seminar articles, websites, etc. All these are used for the evaluation and analysis of the present research topic. Also, qualitative research has been followed while analyzing the research topic. However, the major focus has been given to qualitative research, while quantitative research has been used only for statistical data interpretation.

Limitation of the study:

This study is limited to the Indian scenario and does not consider the international perspective. Also, the author has focused only on the investment sector and did not include any other sectors in this study.

Findings And Discussion:-

Finance and investments are the kinds of industries that are required to be devoid of any errors. For many years, the world was dependent on managers and investors for handwritten accounts of investing and storing of data. The result of this was delays, errors and made the task cumbersome. With the development of information technology (hereinafter referred to as 'IT') and the increased usage of the internet for daily tasks, this generation witnessed the biggest change. IT has made the facilities of storage and transmission of data cheaper than before, which obviously had its effects on the investment sector.¹

In the present era, the achievement rate has risen with fewer and fewer staff. Accuracy is the most crucial requirement of the investment sector as mistakes costs lakhs and crores rupees of investment. Automation has helped in less consumption of time and prompt working results. This sector is filled with risk opportunities and each and every error can make or break the deal. Furthermore, investors are always worried about the status of their investments and IT improves this situation by processing data faster. Hence, the impact of IT on investments is huge.

When we imagine the time before the advent of modern technology, investments was something that was done by a small group of people. The best example of this is stock trading. To invest in a stock of Dalal street, a person had been a professional with years of experience in this regard and having access to the stock market. The only other option was to physically visit the bank for investing in a particular stock, which was an expensive affair and time-consuming. The rise of online investing has relieved people from many such procedures. In the present day, any person having a computer/laptop and internet access can register with an online broker or broking agency and commence the investment in the desired stock. The entire procedure has now been reduced to a matter of minutes and requires very reasonable handling charges. Information technology has allowed the access of investment to those who have the money to invest. It has bridged the gap between the investor and the company that has had a direct impact on the upliftment of the economy of the nation.²

Technology is taking over the majority of the facets of our lives including investments. Although in the investment sector, the contribution of information technology has been limited but has had a major impact. The big question is

¹Misra, V., & Peter B. R. Hazell. (1996). Terms of Trade, Rural Poverty, Technology and Investment: The Indian Experience, 1952-53 to 1990-91. *Economic and Political Weekly*, 31(13), A2-A13.

²Lall, S. and Teubal, M. (1998). "Market stimulating" technology policies in developing countries: A framework with examples from East Asia', *World Development*, 26(8), pp. 1369-1386

does technology help to get higher returns from the investments in the stock market. The answer to this question is both yes and no since it depends upon the users. Following are how technology has affected investments³:

Fast access to data:

In the earlier times, corporate announcements and financial disclosures were done by way of newspapers, magazines, or television. This was not only a cumbersome process but also required lots of time to reach potential investors. However, in the present era, many applications and websites provide information such as corporate announcements and other information required by the investors about the stock or company for choosing an investment. This information is just a few clicks away, which means that access to data has become faster.

Access to comprehensive data:

Nowadays, there are certain websites, which analyze the company's financial pattern, growth, corporate social responsibility, and other trends with a few clicks. Information such as annual reports or news about the company has become a public document. This is sure because of technology.

Trading or investing:

In the earlier times, investors had no other option but to interact with other humans for trading which was usually influenced due to certain biases. Even the brokerage rates and trading rates were very high due to human interaction. Today there are numerous applications for trading and brokers engage on websites and applications for trading. Hence, the disadvantages of the human element have been eradicated.

Role In Investment Banking:

According to a report, due to technological advancement machines will occupy around 10 to 25% of work around all banking services with the help of automation. Automation in the banking sector will free the employees who can then be engaged in a high-value project only. This can be seen in various banks where they have deployed automated technologies so that they can save costs, enhance customer satisfaction, and increase productivity. Domain expertise is evolving with banks as well as vendors, which people are moving for a case-specific solution only.

The management of employees and machines has been a difficult task for the managers. The shift from man to the machine has posed several challenges in front of the managers for re-engineering or re-designing management strategies. For example, in case an investor wishes to open a mutual fund account in HDFC Bank, the website suggests visiting HDFC instance some services cannot be automated yet.

Allowing better and personalized access to financial services is the best benefit that could be availed out of the advent of information technology in the investment sector. For example, a decrease in costing needs to evaluate the past investment record or the financial activities, which could be done more efficiently and with negligible manual intervention with the help of automation. It is a fact that some companies also provide analytics and data to compare other competitors for their records in a statistical format. This could also be achieved due to information technology.⁴

Following are some of the prospects that could be used for financial transformation:

Development of a strategy. Reimagination of employees with technology and focusing on automation will help banks to stand amongst their competitors.

Creation of a team: center of Excellence is crucial for automation as per a long-term perspective. This will help in powerful interfacing and management of relationships with the vendor.

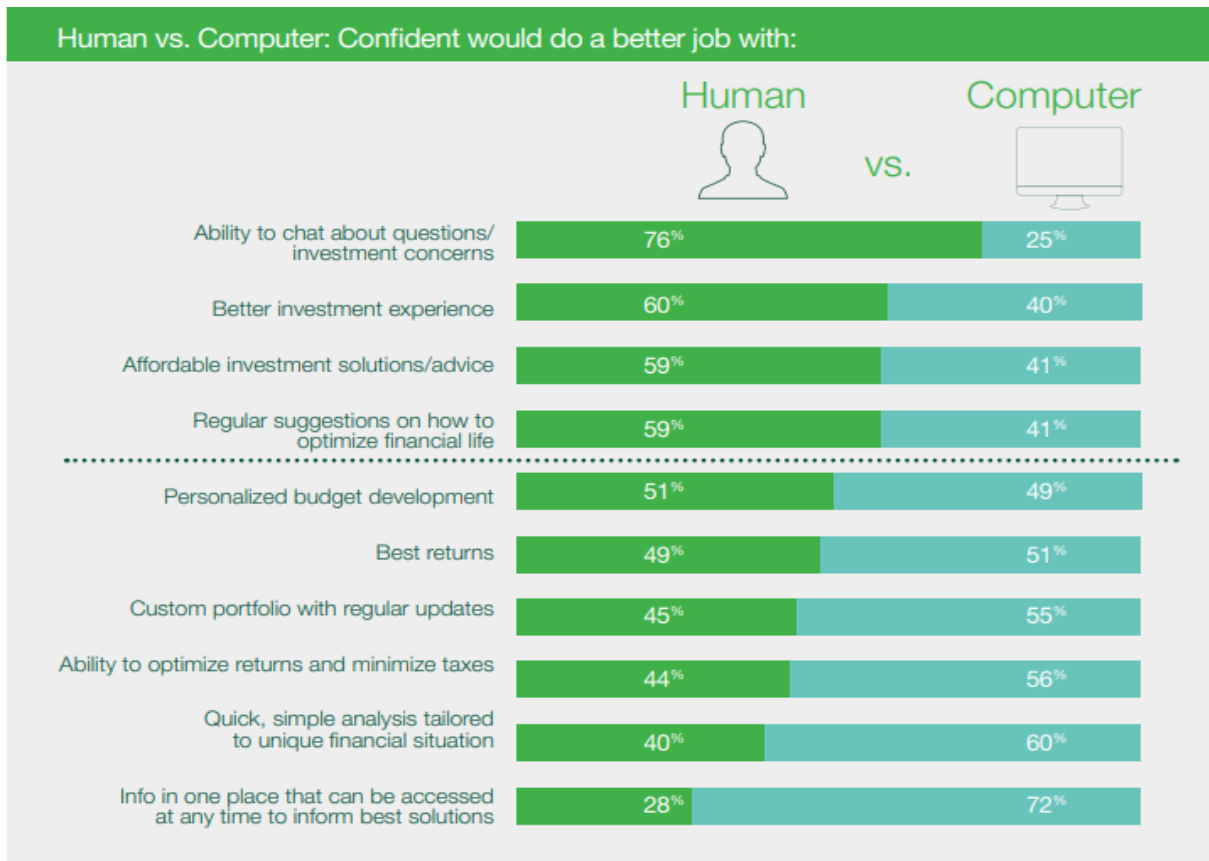
I. ³ VIVEK BANKA, STOCK MARKET INVESTMENT: CAN TECHNOLOGY HELP YOU GET BETTER RETURNS IN STOCK MARKETS?. (2018). FINANCIAL EXPRESS.

⁴ radosevic, s. (1999). international technology transfer and catch-up in economic development, cheltenham: edward elgar.

Creating a roadmap for the implementation of automation capabilities of the future and how vendors and investors will be educated about the new services.

In order to keep up with the investment banking customer expectations while handling technological advancement, long term goals are required to be set following the transformation in information technology.⁵

The below statistics are taken from a report⁶ who surveyed numerous people about the viability of the usage of technology in investments. Although some of the answers were inclined towards the human element of the service. This is because of the fact that people are still adjusting to these new and advanced methods which makes it hard to trust the privacy of their data.



What is next in investing?

Technology has never remained constant except for the fact that it keeps evolving from one day to another. This applies to investments as well wherein next-generation algorithms and services are offered to aid in shaping the new future. Following are some methods in which information technology might impact the future of investments⁷:

Artificial intelligence:

Artificial intelligence can be used for searching for investment opportunities. It is believed that AI will have its impact on the investment sector as well. The next-generation machine learning techniques can aid the system to generate strategies that would be beneficial for the investors and then, they could choose one out of the many. Responsive AIs are also expected to record your past investments in any stock or company to suggest new investment

⁵ World Bank (1999) World Development Report 1999, Oxford: Oxford University Press

⁶ Tim Hockey. The Tech Effect: How the digital age is changing investing. Ameritrade.

A. ⁷ Jay Riley, *Technological Impact on the Future of Investing*. (2019). IT Briefcase.

prospects that if the investor would consider. The main basis of extracting such information would be the investor's social media presence and accounts as well as the previous long-term and short term investments done by the investor.

Robotic Advisors:

As compared to the present situation of the advent of information technology in the investment sector artificial intelligence is expected to bring a greater amount of automation when it comes to future investments. Meaning thereby, the management of your investment portfolio could be done by robotic Advisors, which could be independent of any kind of human intervention. Needless to say, this will save a lot of time and effort in dealing with investments yourself. This system can also enable the new investors in the financial market to benefit from the financial opportunities and rely upon a trusted source of advice.

Blockchain:

We cannot leave block chain out of the discussion when we talk about next-generation investment Technologies. Blockchain was originally developed for the use of cryptocurrencies but has now grabbed the attention of various investors and IT professionals. It has the potential to serve as a financial intermediary for the investors to eat their financial requirements of investing.

Sophistication:

A very impactful need for the future of investment is the sophistication of brokers. Rather than expecting technology to completely take over the investment sector some investors team that market analysis can only be done by humans by equipping them with powerful Technology. This makes the investment procedure even more trustworthy.⁸

The most important thing to be kept in mind is the accessibility of the future technology to be used in investments. There might be a possibility that a few investors would not be as technologically equal to the others. The new system should consider the diversity of the nation.

Conclusion:-

Technology is the fastest-changing tool in the world. One of the major impacts of the advent of Technology in the investment sector is that investors and organizations are able to think react and operate much quicker than ever before. This is because now investors or organisations doesn't have to go to a bank or any other physical place. Everything, they need to do right from making an investment or selling the same and more is right under their fingertips thanks to technology. Furthermore, even bank transactions have become hassle free, thanks to the contributions of technology it can be done with an instant hence getting the funds ready for investments a lot easier. Chance for errors or clerical errors have become very minimal thanks to technology as well. I can firmly believe that the future of investment is looking bright cause of rapidly evolving technology and how it can be adapted in almost all spheres of investment.

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