



Short Review Paper

Impact of modern technology on the stock market in India and its future

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Available online at: www.isca.in, www.isca.me

Received 15th February 2018, revised 21st May 2018, accepted 9th June 2018

Abstract

Over the past few decades, the speed and extent of development of stock exchange in developing nations like India has created elementary shift within the monetary structure of the nation. One of the principal explanations for the same is the development in the information technology (IT) sector of the country that has offered investors' well-organized system to research and purchase stocks online. For instance, computer systems records purchasing and buying orders so rapidly that investors can know their price and other details within a few seconds. Besides, trading through electronic devices eradicates handling of transactions by people and eliminates errors that had become frequent in case of traditional methods. By the systematic application of modern information technology (IT) techniques our nation can develop such an electronic trading process that can offer investors fast and accurate trading as well as professional techniques and methods of stock trading. Here the paper tries to search out the impact of IT on the development of stock market as well as discusses its future prospects in India. To achieve the aforesaid, an extensive literature review has been done to get a clear understanding of the topic. All the information enclosed is that the secondary base and references are given where necessary.

Keywords: Electronic trading, information technology (IT), investors and stock market.

Introduction

Over the past few years, India's stock markets have surged. The developing markets in India have represented a lots of boom. The speed of development of stock market in the nation have been unprecedented and have led to shift both in the monetary structures of the country and in the fund flows from developed countries. Securities exchanges are relied upon to quicken financial development by giving a lift to residential reserve funds and expanding the amount and the nature of investment¹. One of the key explanations for the same is the growth and development in the information technology sector of the country.

Computers have changed the exchanging of securities and the stock exchange is directly amidst an active transformation. It was during the industrial era, when the trading was done in the market area, with the exchange of property and the government's responsibility was simply to protect property market. It is now clear that the upcoming market will not be similar to the markets of the past. What will trade in India look like 25 years from at this moment? Indeed, at show technology is modifying so quick that exchanging will look altogether different even quite a while from now. It's not precarious to envision. We can consider it thusly: What the especially rich individuals have today is the thing that the working class will get in 25 years, and that will include a full-time extraordinary investment guide.

It's simply that the counsel may be an artificial intelligence stage giving investment advice to a computerized symbol of the individual financial specialist. Investors will have unique and exclusive access to information about companies and their stocks price fluctuations. The advanced information technology i.e. web gives current stock costs, organization income reports, and breaking news about stocks and the organizations issuing those stocks. Budgetary counsels can impart and transmit avant-garde advancements to their customers, and organizations can track and take after the execution of their stock continuously. This will bring about leaving of exact and behind to date data to the investors, brokers and counsels. Today, the world is quick turning into a information society with the development of IT in all parts of human life. Web access and use of data assets in every human culture have profited everybody. IT framework improvement is a multi-step process. Foundation of correspondence, legitimate and instruction framework and workforce preparing are the fundamental endeavors to be made in such manner. In India, issues, for example, instructive advancement and social improvement must be given extraordinary consideration for its fruitful execution in the stock market.

Objectives of study: The objectives of the present investigation are: i. To study the impact of IT on the development of stock market in India. ii. To put forth workable suggestions to further enhance the working of stock market through Information Technology in future.

Methodology

A secondary study has been done to recognize the impact of Information Technology (IT) in developing stock market in India. Information from journals, articles and websites was taken to accomplish this task. A writing survey of the work done by prominent journalists was done to get a reasonable comprehension of the theme. All the information enclosed is that the secondary base and references are given where necessary.

Literature Review

Lewis D. Solomon and Louise Corso from their study concluded that the computer and electronic systems have helped the investors and brokers to communicate and trade with each other without intervention by exchange specialists². Coward unfolded that in the past few years, with the growth in the number of start-ups online trading has also increased³. Colvin emphasized on the significance of Internet business for making profit. He discovered some interesting facts about the "Net"-corporate as how they assist in hiding profits with the application of accounting math⁴.

Strauss et al. perceive technology as a mediator that helps in minimizing costs. Several companies are applying it in electronic order processing, billing and for communication through e-mail as it helps in saving money as well as effort. Hence, marketing products over the Internet, has helped them to gain competitive advantage⁵.

What is stock market?: The stock market is collection of markets and exchange where the issuing and exchanging of equities, bonds and other sorts of securities happens, either through formal trades or over-the-counter markets. It is also called as equity market.

How Does the Stock Market Work?: The stock market can be divided into two main sections: i. Primary market, ii. Secondary market.

Primary market: The primary market is one where new issues are first sold through initial public offerings (IPOs). Institutional investors commonly buy the greater part of these offers from venture banks.

Secondary market: The secondary market is one where members incorporate both institutional and individual investors. Stocks of companies are exchanged through trades, exchanges that unite purchasers and sellers where stocks are recorded and exchanged. Such trades are spread everywhere throughout the world⁶.

How is India's Stock Exchange?: In India mainly the trading in stock exchange takes place on two stock exchange: i. Bombay Stock Exchange (BSE), ii. National Stock Exchange (NSE).

The BSE has been in presence since 1875 while the NSE was established in 1992 and begun exchanging 1994. The two trades take after a similar exchanging system, exchanging hours, settlement process, and so on. All the imperative firms of India are recorded on both the trades. Out of all the recorded firms on the BSE, just around 50 firms constitute over 90% of its market capitalization; and the remaining group comprises of exceedingly illiquid shares. NSE acknowledges a mind-boggling offer in spot trading, with around 70% of the market share, beginning at 2009, and practically an aggregate controlling foundation in subordinates trading, with around a 98% offer in this market, furthermore beginning at 2009. Both the exchanges pursue the demand stream that prompts decreased costs, market adequacy and advancement. The arbitrageurs keeps the price of securities on the two stock exchanges inside a tight range. Trading at both the exchanges occurs through an open electronic purpose of imprisonment mastermind book, in which organize planning is done by the trading computers. There are no market makers or aces and the entire technique is orchestrate driven, which suggests that market orders set by financial specialists are normally planned with beyond what many would consider possible solicitations. Consequently, buyers and dealers remain obscure. The advantage of a order driven market is that it brings more straightforwardness, by demonstrating all buy and offer demands in the trading system. In any case, without market creators, there is no affirmation that solicitations will be executed. All solicitations in the trading structure ought to be set through merchants, an impressive part of which give online trading office to retail customers. Institutional financial specialist can in like manner misuse the quick market get to (DMA) decision, in which they use trading terminals given by delegates to putting orders clearly into money markets trading framework.

Settlement Cycle and Trading Hours: Equity spot markets take after a T+2 moving settlement. This suggests any trade happening on Monday gets settled by Wednesday. All trading on stock exchanges occurs between 9:15 am and 3:30 pm, Indian Standard Time (+ 5.5 hours GMT), Monday through Friday. Conveyance of offers must be made in dematerialized form, and each exchange has its own specific clearing house, which expect all settlement chance, by filling in as a central counter party⁷.

Market Regulation: The Securities and Exchange Board of India (SEBI) controls the advancement and manages the working of the stock market. It has the powers of imposing penalties on market participants, in case of a breach or fraud. It has always tried to make market rules in line with the best market practices.

Impact of IT on Stock Market in India: Electronic trading has empowered the marvel of high-recurrence trading. Individuals are utilizing this trading style to purchase and offer stocks around the same time, some of the time executing a full

purchase and-offer cycle inside minutes. In spite of the fact that this offered ascend to what is regularly called "day trading" for people, the genuine effect originates from institutional financial investors who start exchanges a huge number of offers in a matter of minutes. This can trigger a purchasing or offering furor among different financial specialists who need to take part in what they see as a pattern creating in a specific stock. This kind of trading was unavailable when trading was much slower. Technology has massively affected our lives and is by and large respected to have enhanced our social lives, organizations, governments and instruction. Unless you are a broker or a financial specialist very little idea is offered with regards to the effect technology has had on the profitability of the Stock Market.

Today the computers utilized by brokers can expedite an arrangement in nanoseconds significantly faster than a human. The presentation of Algorithms into the business sectors has altered the way stock agents choose what stocks to purchase and offer. Algorithm Trading utilizes computer programs that take after specific directions to figure diagram designs keeping in mind the end goal to make safe investments. It is clear the stock trade will keep on evolving more modern methods for managing as innovation keeps on progressing. Big Data will have the capacity to be utilized for estimating market brain science, but for the accomplishment of mechanized exchanging the human component will keep on being required in the computer's calculation.

Suggestions

The Blockchain technology can help forestall forging cash and financial exchanges. Bitcoin, records financial exchanges or any advanced collaboration in a safe, straightforward, traceable, and an effective way. Thus, it not just suits for giving a wide spread virtual cash but also for computerized bookkeeping and reviewing the financial exchanges of any nature. Financial markets produce monstrous measure of information consistently, recording and analysis of these data is difficult. A mix of private and public cloud takes care of the issue of storage and real-time access to this sea of information at a reasonable cost. Such an examination should never be possible without utilizing big data analysis. There can likewise be software that break down thousands of online social networking information about the sentiment and news around an organization and can predict future and potential sentiments around the organizations. These bits of knowledge can change the path institutional and additionally retail investor exchange in the market. While some of these advancements might be in beginning times of improvement and require critical upgrades and market premium yet the ground has been set for computerized change.

Conclusion

Technology is making financial markets more straightforward, available, comprehensive and productive. The advances which can possibly change the financial markets in the coming days

are Artificial Intelligence (AI) and natural language processing. Numerous financial firms are taking help of algorithms to carry out the activity. Machine learning algorithms have enhanced fundamentally. With developing processor capacities at bring down cost, these algorithms are accessible for more extensive utilize. Artificial intelligence strategies enable frameworks to gain from user interaction and patterns without being expressly programmed for it. In financial markets, there is software for voice analysis examples of recorded calls at investment banks, brokerages or even on the customer side. It can rapidly figure out how to distinguish abnormalities and frauds. It can likewise take a gander at watchwords, decipher colloquial, encryption of data and perform complex search on the recorded data. Smart algorithms can distinguish new examples of exchanging or framework mishandle in capital markets. These innovations additionally robotize the basic leadership process in the quick paced budgetary exchanging condition, where timing of choices is critical. Algorithms have developed to comprehend monetary objectives, risk profile and other many-sided points of interest of a investors to concoct customized investment portfolio. It can reallocate reserves, book profits, or square off positions based on self-learning algorithms. The stage can either be web-based or potentially smart phone-based, making it to a great degree simple to get to or modify. This is self-worked without the client talking to a live individual. Here the client gets this services at no recurring cost. Scandals in view of data burglary have dependably been a major issue for players in financial markets. Till know, hackers have dependably been figured out how to remain in front of security projects and passwords. Be that as it may, this may change soon.

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